SCREENING SITE INSPECTION REPORT
FOR
GMC FISHER BODY DIV ELYRIA PLT
ELYRIA, OHIO
U.S. EPA ID: OHD004201091
SS ID: NONE
TDD: F05-9004-011
PAN: F0H0331SB

SEPTEMBER 23, 1991

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SIGNATURE PAGE
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1. INTRODUCTION

Ecology and Environment, Inc., Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the GMC Fisher Body Div Elyria Plt (GMC-FBD) site under contract number 68-01-7347.

The site was initially discovered by the Ohio Environmental Protection Agency (OEPA) Solid Waste Program on May 15, 1984, during a preliminary site inspection.

The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by Catherine McCord, OEPA, Northeast District Office, and is dated March 30, 1984 (U.S. EPA 1984).

FIT prepared an SSI work plan for the GMC-FBD site under technical directive document (TDD) F05-9004-011, issued on April 16, 1990. The SSI work plan was approved by U.S. EPA on July 23, 1990. The SSI of the GMC-FBD site was conducted on September 18, 1990, under amended TDD F05-9004-011, issued on August 21, 1990.

The FIT SSI included an interview with site representatives, a reconnaissance inspection of the site, and the collection of seven soil samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for

> the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.
>
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI. (U.S. EPA 1988)

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section presents information obtained from SSI work plan preparation, the site representative interview, and the reconnaissance inspection of the site.

2.2 SITE DESCRIPTION

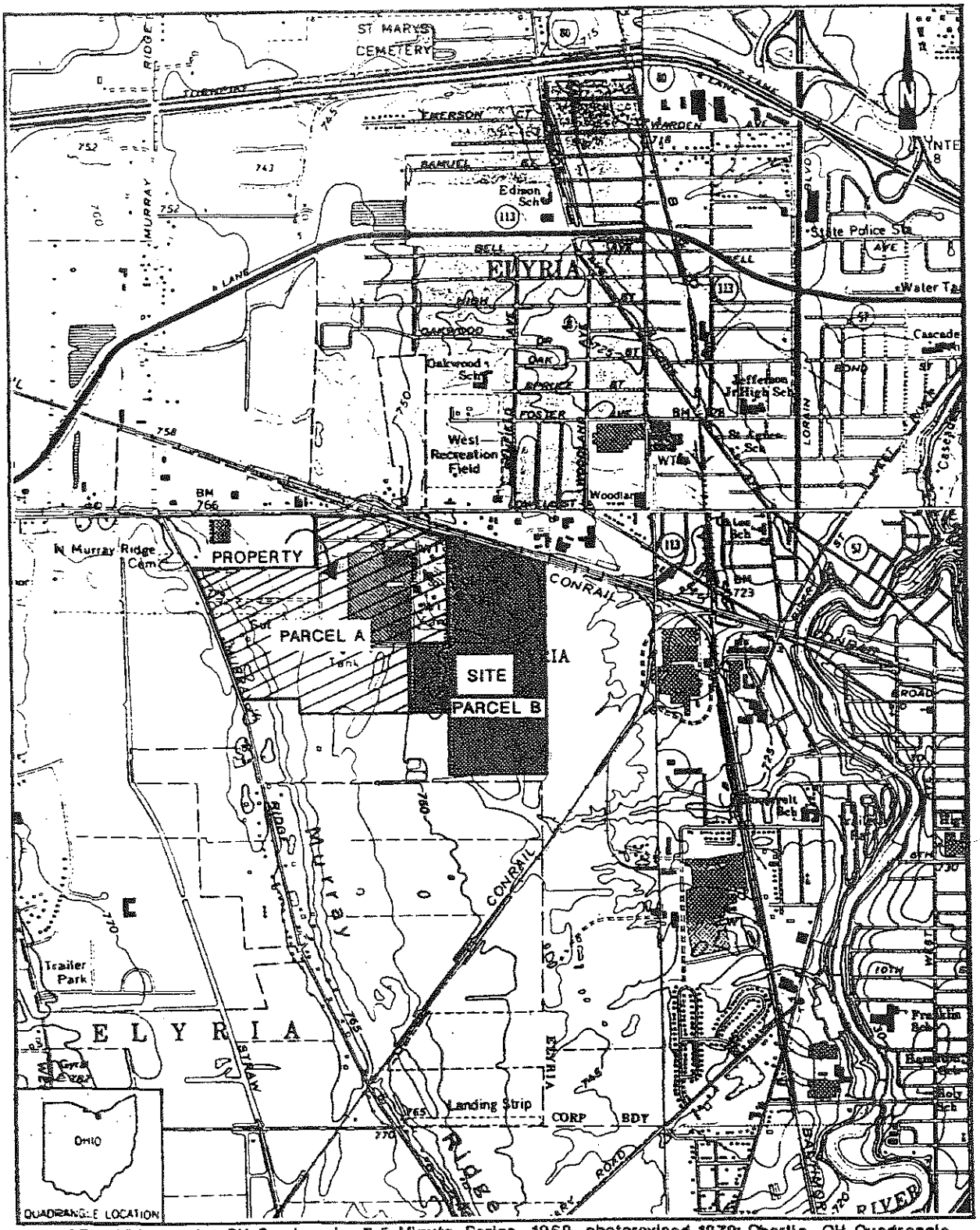
The GMC-FBD site is approximately 85 acres in size, and contains three inactive disposal areas and an engineered landfill. The site is part of a 226-acre property. The property has been divided into two parcels, A and B. Parcel B is the site; parcel A consists of the remaining 141 acres of the property (see Figure 2-1 for site location).

The site address is 1400 Lowell Street, Elyria, Ohio 44036. The GMC-FBD site is located in a rural area on the western edge of the city of Elyria, in Lorain County, along Conrail Railroad tracks, 3/4 miles west of the Black River.

A 4-mile radius map of the GMC-FBD site is provided in Appendix A.

2.3 SITE HISTORY

The GMC-FBD site is currently owned by General Motors Corporation. In 1946, General Motors built a plant on parcel A of the property, and began manufacturing parts for the automotive industry in 1952. Prior to purchase by General Motors, the site was used as a cabbage field. FIT files do not contain information concerning previous owners. In 1984, the plant was assigned to the Fisher Guide Division of General Motors.



SOURCE: USGS, Lorain, OH Quadrangle, 7.5 Minute Series, 1969, photorevised 1979; Oberlin, OH Quadrangle, 7.5 Minute Series, 1969, photorevised 1979; Avon, OH Quadrangle, 7.5 Minute Series, 1963, photorevised 1979; Grafton, OH Quadrangle, 7.5 Minute Series, 1963, photorevised 1979.

SCALE
0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION

The facility closed in July 1988. Internal political problems were blamed for the closing of the plant (Kienle 1990).

In October 1989, General Motors sold parcel A to the Northern Ohio Industrial Park. The plant building is currently being used for office space. General Motors still owns parcel B, the site (Kienle 1990).

When the plant first opened, the products included auto grills, wheel covers, die casted parts, and instrument panels. Beginning in 1984, the products manufactured at the plant included seat cushions, metal seat frames, sun roof assemblies, and exterior/interior trim items. Electroplating has been a major process used in the manufacturing of many of these products. During operation, the General Motors plant employed approximately 2,080 persons as an annual average (Kienle 1990).

While in operation, four basic types of wastewater were generated at the plant: 1) acid/alkali or metal bearing wastewater; 2) chromic acid bearing wastewater; 3) cyanide based wastes and rinses; and 4) cleaner, presoak based wastes (Fisco 1970). General Motors also operated a wastewater treatment plant (WWTP) on-site to neutralize and treat any wastewater from the various plating lines at the plant. From 1956 until 1988 the water effluent from the WWTP was discharged into an Elyria city storm sewer under a National Pollution Discharge Elimination System (NPDES) permit (OEPA 1985). It is not known where wastewater effluent was discharged prior to 1956. The WWTP is located on parcel A, next to a fence between parcels A and B. The WWTP has been decontaminated and cleaned, and is currently sitting idle. The storm sewer, known as outfall 001, discharged into the Black River approximately 3/4 miles east of the GMC-FBD site. Minor NPDES permit violations were documented by OEPA and plant officials, but each was adequately corrected and no further action was necessary (Bush 1978).

The wastewater sludges that were generated at the plant have been classified as RCRA waste code F006. These electroplating treatment sludges primarily consisted of cadmium, chromium, nickel, and cyanide (U.S. EPA 1984). Prior to the 1970s, the sludges were settled out in thickening tanks and removed for off-site disposal (Fisco 1970). Beginning in the early 1970s, treatment sludges were placed into three 200 foot by 500 foot settling basins located on parcel B, the site. These

unlined surface impoundments had a total capacity of approximately 40,000 cubic yards (Mustafa 1990a).

On July 31, 1984, the plant discontinued the majority of its electroplating operations, reducing the sludge loading of the WWTP. General Motors then incorporated filter press technology for sludge dewatering, eliminating the need for surface impoundments at the site. A RCRA closure plan was submitted in 1986 for the closure of the surface impoundments. The plan was approved by OEPA on August 7, 1987. The plan suggested that the surface impoundments be closed and converted into an engineered landfill for hazardous waste, with a double, clay and synthetic liner with primary and secondary leachate treatment systems. The sludge in the surface impoundments was stabilized using cement kiln dust, excavated, and placed in the landfill, which was constructed where two of the surface impoundments had been located (Mustafa 1990a).

In anticipation of the closure of the facility, General Motors included in its 1986 closure plan the clean closure of a drum storage area and two toluene diisocyanate (TDI) treatment tanks which were located on parcel A. The closure plan also included a required 30 years of groundwater monitoring of the hazardous waste landfill. FIT file information indicates that final postclosure certification under RCRA has not yet been granted for the landfill. OEPA will conduct post-closure inspections as required (Mustafa 1990).

At least 11 monitoring wells surround the hazardous waste landfill, many of which existed when the surface impoundments were still in use. Exact dates of all monitoring well installations are not known to FIT at this time. Nor is it known who drilled the wells.

In June 1981, General Motors filed a Notification of Hazardous Waste Site form, pursuant to section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act. The form indicated that heavy metals and bases from plating/polishing operations were disposed of in a 20-acre area on-site from 1950 to 1977 (U.S. EPA 1981). Buried drums were also indicated in the form. The 20-acre area refers to three disposal areas on-site, north and east of the engineered landfill. These disposal areas are known as A, B, and C. Unlike the engineered landfill, these disposal areas have never been regulated under RCRA (Mustafa 1990a). It does not appear that soil sampling has

ever been conducted in or around disposal areas A, B, or C prior to the SSI conducted by FIT.

Area A covers approximately 4.8 acres, and was used for the open burning of plant trash from 1947 to 1974. Area A is currently vegetated. FIT file information does not indicate what was disposed of in this area. Area B covers approximately 5.7 acres and was used for the disposal of WWTP sludges from 1956 to 1967. The estimated volume of area B is 25,000 cubic yards. This area is currently covered and vegetated. Area C covers approximately 6.5 acres and was used for the disposal of WWTP sludges from 1972 to 1977. The estimated volume of area C is 40,000 cubic yards. This area is currently vegetated (Mustafa 1990a).

Most of General Motor's closure efforts have concentrated on the monitoring of the hazardous waste landfill. It is not known what plans, if any, General Motors has for former disposal areas A, B, and C. No further remedial actions have been taken concerning the GMC-FBD site.

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI of the GMC-FBD site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures. Rationales for specific FIT activities are also provided. The SSI was conducted in accordance with the U.S. EPA-approved work plan.

The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the GMC-FBD site is provided in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

Cynthia Schultz, FIT team leader, conducted an interview with Philip Kienle, Senior Environmental Engineer, General Motors, and Lowell Metzger, O.H. Materials, environmental consultants, of Findlay, Ohio. The interview took place on September 18, 1990, at 8:00 a.m. at the GMC-FBD site located at 1400 Lowell Street, Elyria, Ohio 44036. The interview was conducted to gain information concerning the site to aid FIT in conducting SSI activities.

3.3 RECONNAISSANCE INSPECTION

Following the site representative interview, FIT conducted a reconnaissance inspection of the GMC-FBD site and surrounding area in accordance with Ecology and Environment, Inc. (E & E), health and safety guidelines. The reconnaissance inspection began at 10:00 a.m., September 18, 1990, and included a walk-through of the site to determine appropriate health and safety requirements for conducting on-site

activities and to make observations to aid in characterizing the site. FIT also determined sampling locations during the reconnaissance inspection. FIT was accompanied by site representatives during the reconnaissance inspection.

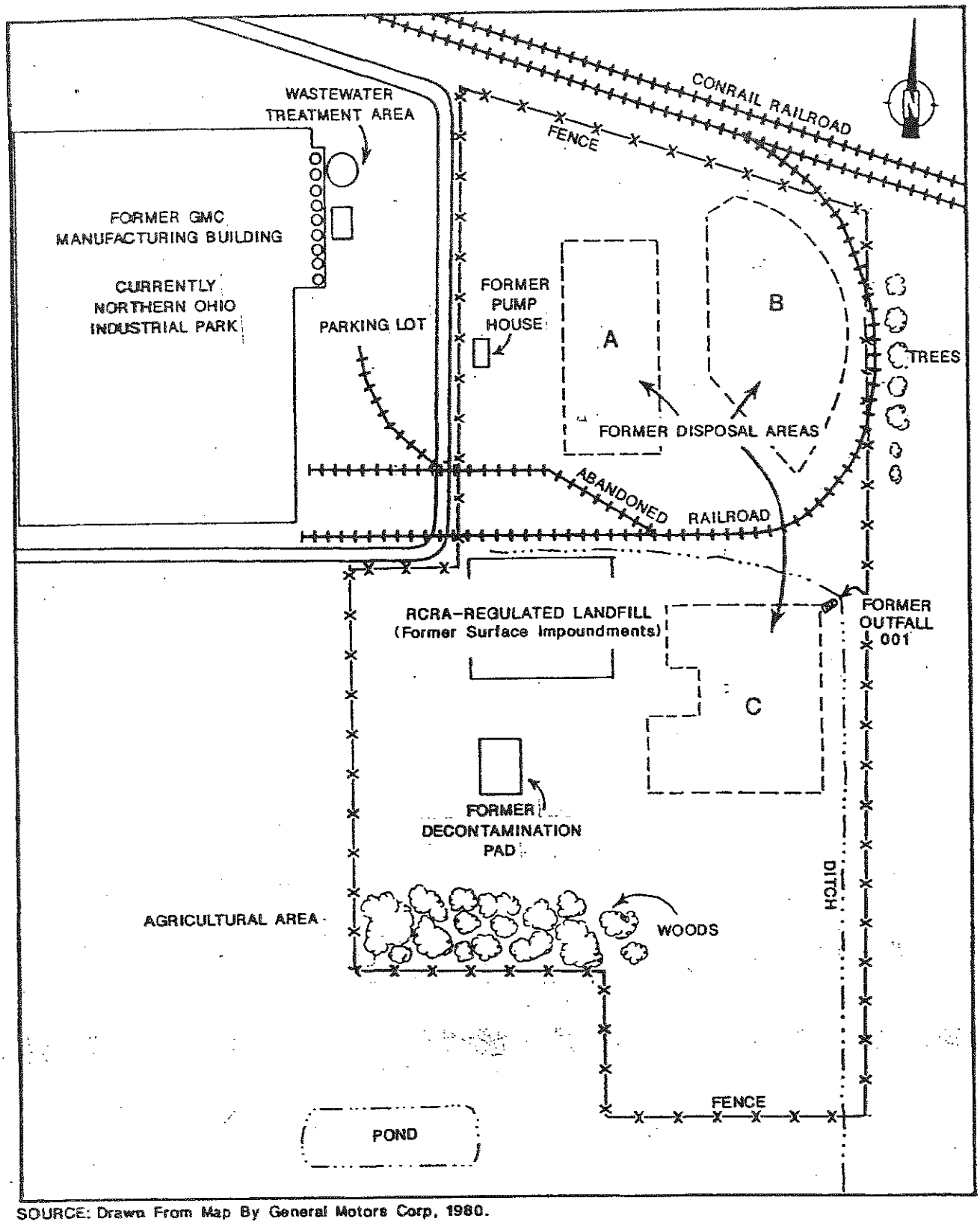
Reconnaissance Inspection Observations. The GMC-FBD site is bordered by Conrail Railroad tracks to the north, and by parcel A and agricultural land to the west (see Figure 3-1 for site features). Agricultural land borders the site to the east and south. Residential areas are located north and west of the site. Further north, approximately 1/4 mile, light industrial areas exist, as well as a school and a large recreational field. Light industrial and commercial areas are primarily located further east of the site, closer to Elyria. The Black River is located approximately 3/4 miles east of the site. The river flows to the north.

The site is completely enclosed by a 7-foot-high cyclone fence with a locked gate. An abandoned railroad spur runs south along the eastern border of the site from the Conrail Railroad tracks, then turns to the west, across the center of the site, and ends at the plant building on parcel A. Former disposal areas A and B are located north of the abandoned spur; former disposal area C and the engineered landfill are located south of the spur. The disposal areas are vegetated and blend in with the surrounding terrain. The landfill is slightly sloped. Monitoring wells surround the landfill (see Figure 3-2 for monitoring well locations).

A former pump house is located approximately 150 feet west of disposal area A. A former truck decontamination pad and woods are located south of the engineered landfill.

A ditch that serves as the Elyria storm sewer runs east from parcel A, just south of the abandoned spur, then turns to the south at the eastern fence line. Former outfall 001 leads from the northeast corner of disposal area C to the drainage ditch.

The former General Motors plant building is located on parcel A, just west of the site. The WWTP is located at the northeast corner of the building. A parking lot is located between the site fence and the plant building. Parcel A is partially fenced.

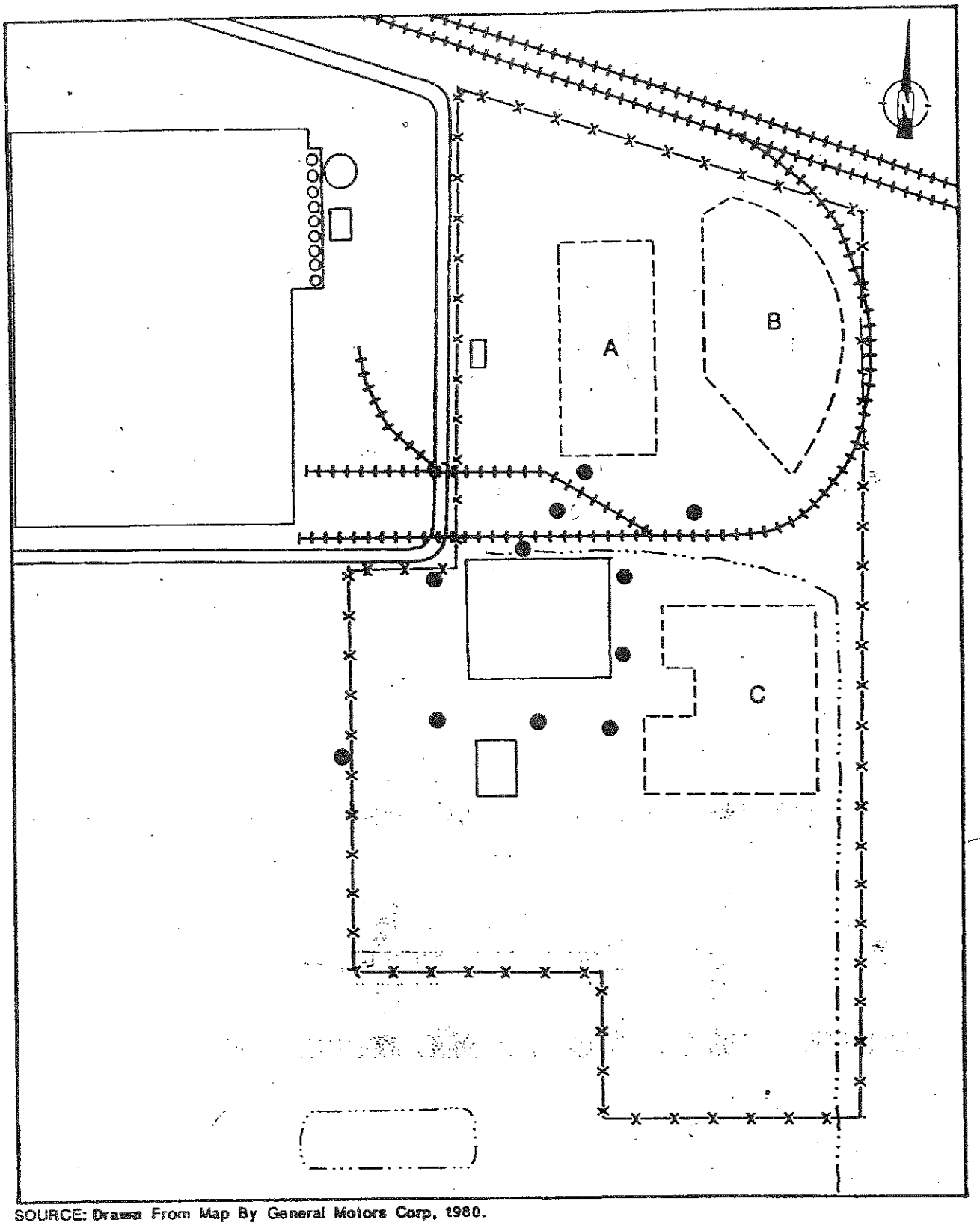


SOURCE: Drawn From Map By General Motors Corp, 1980.

SCALE

0 200 400 600 800 1,000 FEET

FIGURE 3-1 SITE FEATURES



SOURCE: Drawn From Map By General Motors Corp, 1980.

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FIGURE 3-2 MONITORING WELL SAMPLING LOCATIONS

FIT photographs from the SSI of the GMC-FBD site are provided in Appendix C.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine whether U.S. EPA Target Compound List (TCL) compounds or Target Analyte List (TAL) analytes were present at the site. The TCL and TAL are included with corresponding quantitation/detection limits in Appendix D.

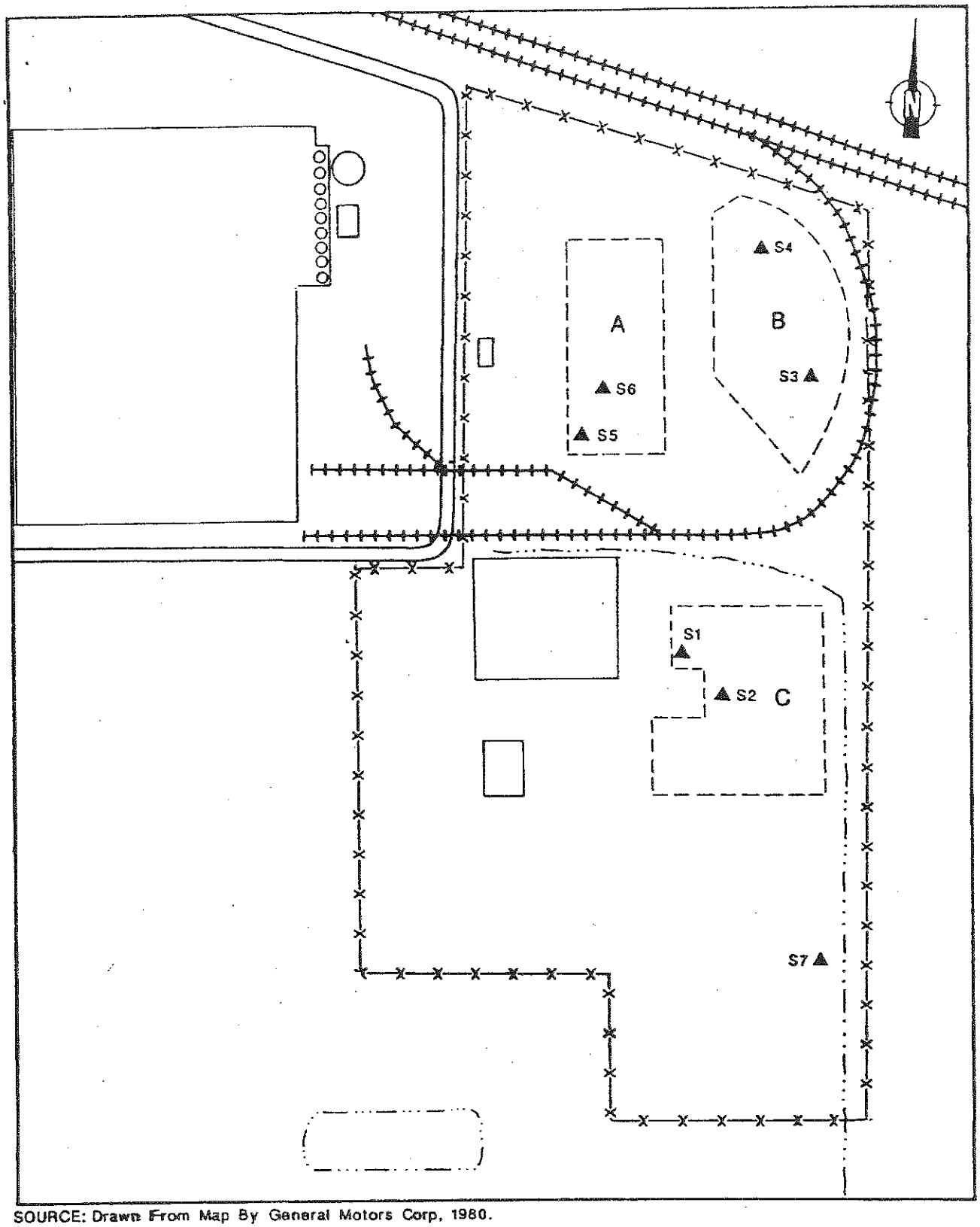
On July 18, 1990, FIT collected seven on-site soil samples from disposal areas A, B, and C, including a potential background soil sample. Portions of soil samples were offered to the site representative, and three portions, from samples S2, S3, and S5, were accepted.

Groundwater sampling was not conducted during the SSI, because groundwater flow direction in the area of the site is to the northeast. Therefore, all on-site monitoring wells, as well as all residential wells in the area of the site, are considered to be upgradient or side gradient of former disposal areas A, B, and C. Any TCL compounds and TAL analytes FIT might detect in on-site monitoring wells would likely have migrated to groundwater from the area of the former surface impoundments, where the engineered landfill is currently located. This area is upgradient of disposal areas A and B and west of disposal area C.

Soil Sampling Procedures. Two soil sampling locations were selected by FIT at random in each of the three former disposal areas, A, B, and C (see Figure 3-3 for soil sampling locations). The locations were selected to determine whether TCL compounds or TAL analytes were present on-site. These samples were all collected at depth to better characterize wastes deposited in the disposal areas.

Soil sample S1 was collected from the northwest corner of area C, at a depth of 5 feet, by using both a power auger and a hand auger. Soil sample S2 was collected with a shovel in disposal area C, southeast of sampling location S1, at a depth of 3 feet.

Soil sample S3 was collected with a shovel and a posthole digger from the southern end of disposal area B; soil sample S4 was collected with a shovel in area B, approximately 225 feet northwest of sampling



SOURCE: Drawn From Map By General Motors Corp, 1980.

SCALE

0 200 400 600 800 1,000 FEET

FIGURE 3-3 SOIL SAMPLING LOCATIONS

location S3. Samples S3 and S4 were collected at depths of 2.5 feet and 1 foot, respectively.

Soil samples S5 and S6 were collected with a shovel and posthole digger from disposal area A. The samples were collected approximately 100 feet apart from the southern end of the area, at depths of 1.5 to 2 feet.

A potential background soil sample, S7, was collected with a shovel from an area south of disposal area C. The background soil sample was collected to determine the representative content of soil in the area of the site. The sampling location was selected because it appeared to be in a relatively undisturbed area on-site.

The volatile organic analysis sample portions were collected first and transferred directly to sample bottles. All remaining sample portions were transferred to stainless steel bowls with a shovel, post-hole digger, and/or hand auger. Sample material was then transferred to appropriate sample containers using stainless steel trowels (E & E 1987).

Standard E & E decontamination procedures were adhered to during the collection of all soil samples. The procedures included the scrubbing of all equipment (e.g., power auger, hand auger, posthole digger, shovel, stainless steel bowls, and trowels) with a solution of detergent (Alconox) and distilled water, and triple-rinsing the equipment with distilled water before the collection of each sample (E & E 1987). All soil samples were packaged and shipped in accordance with U.S. EPA-required procedures.

As directed by U.S. EPA, all soil samples were analyzed using the U.S. EPA Contract Laboratory Program (CLP).

4. ANALYTICAL RESULTS

This section presents results of the chemical analysis of FIT-collected on-site soil samples for TCL compounds and TAL analytes. All samples were analyzed for volatile organics, semivolatile organics, pesticides/polychlorinated biphenyls (PCBs), metals, and cyanides. Complete chemical analysis results of FIT-collected soil samples are provided in Table 4-1.

Quantitation/detection limits used in the analysis of soil samples are provided in Appendix D.

The analytical data for the chemical analysis of soil samples collected for this SSI have been reviewed by U.S. EPA for compliance with terms of CLP, and the review has been approved by U.S. EPA. The analytical data have also been reviewed by FIT for validity and usability. Any additions, deletions, or changes to the data have been incorporated in the chemical analysis results table presented in this section.

Table 4-1
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED SOIL SAMPLES

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7
Date	9/18/90	9/18/90	9/18/90	9/18/90	9/18/90	9/18/90	9/18/90
Time	1150	1245	1355	1435	1515	1555	1630
CLP Organic Traffic Report Number	EKH56	EKH57	EKH58	EKH59	EKH60	EKH61	EKH62
CLP Inorganic Traffic Report Number	MEKS56	MEKS57	MEKS58	MEKS59	MEKS60	MEKS61	MEKS62
Compound Detected (values in µg/kg)							
Volatile Organics							
methylene chloride	—	—	—	35J	—	—	—
trichloroethene	—	—	—	—	8	1J	—
tetrachloroethene	—	—	9J	—	5J	25J	12J
toluene	—	—	—	—	—	3J	—
Semivolatile Organics							
phenanthrene	—	—	—	—	220J	—	—
fluoranthene	—	—	—	—	190J	—	—
pyrene	—	—	—	—	130J	—	—
bis(2-ethylhexyl)phthalate	2,300	650J	870J	3,500	240J	—	300J
Pesticides/PCBs							
Endrin	—	—	—	—	6.2J	—	—
4,4'-DDD	—	—	—	—	110	—	—
Aroclor 1254	—	—	56J	—	770	—	—
Analyte Detected (values in mg/kg)							
aluminum	11,100	20,600	27,800	18,200	13,700	17,400	15,800
antimony	253NJ	80.4NJ	116NJ	385NJ	R	R	R
arsenic	21.9NJ	25.7NJ	12.9NJ	23.1NJ	3.9NJ	5.8NJ	10.4NJ
barium	169	127	177	217	122	119	75.7

Table 4-1 (Cont.)

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7
beryllium	1.2B	1.3B	1.3B	0.98B	1.2	1B	0.75B
cadmium	10.6	7.7	8.3	20.9	4.8	3.8	3.6
calcium	55,600	37,500	74,000	176,000	40,500	15,500	1,210B
chromium	22,100	6,120	10,000	34,500	671	51.8	21.8
cobalt	36.5	25	14.8B	26.3	8.2B	9.4B	8.9B
copper	4,370	1,820	2,090	12,800	216	31.5	9.5
iron	23,600	35,300	28,200	6,810	29,300	25,200	26,200
lead	174*J	21*J	44.4*J	117*J	7.7*J	15.2*J	24.9*J
magnesium	4,860	9,200	13,300	3,680	9,180	5,580	2,530
manganese	397N*J	327N*J	467N*J	89.2N*J	2,810N*J	705N*J	320N*J
mercury	0.41NJ	0.17NJ	—	0.45NJ	—	—	—
nickel	9,580	2,990	4,590	24,300	669	38.4	15.9
potassium	1,620B	3,540	3,380	498B	1,650	1,790	1,570
selenium	1.3B	0.85B	1.6B	3.2	0.33BWJ	0.42B	0.54B
silver	R	R	R	7.1NJ	R	R	R
sodium	57.6B	41.6B	—	—	114B	35.3B	—
vanadium	—	4.3BNJ	—	—	38.8NJ	38.2NJ	34.5NJ
zinc	3,360	1,470	1,930	3,790	1,010	115	81.9
cyanide	30.6NJ	8.7NJ	—	143NJ	—	—	—

— Not detected.

Table 4-1 (Cont.)

COMPOUND QUALIFIER	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semi-quantitative.
B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section presents discussions of data and information pertaining to potential migration pathways and targets of TCL compounds and TAL analytes that are possibly attributable to the GMC-FBD site.

The five migration pathways of concern discussed are groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

Groundwater samples were not collected by FIT because of a lack of wells potentially downgradient of disposal areas A, B, and C. However, TCL compounds and TAL analytes that are attributable to the site were detected in on-site soil samples, including 4,4'-DDD at 110 µg/kg and Aroclor 1254 at 770 µg/kg in sample S5, and chromium at 34,500 mg/kg, copper at 12,800 mg/kg, nickel at 24,300 mg/kg, zinc at 3,790 mg/kg, mercury at 0.45NJ mg/kg, and cyanide at 143NJ mg/kg in sample S4. These TCL compounds and TAL analytes are attributable because they were detected at levels above those of the background sample, and because electroplating sludges primarily consisting of cadmium, chromium, nickel, and cyanide were deposited in on-site disposal areas A, B, and C for approximately 17 years.

A potential exists for the migration of TCL compounds and TAL analytes to groundwater from the GMC-FBD site because disposal areas A, B, and C are unlined. The potential is also based on the following geologic and hydrogeologic information. The Elyria area lies on a glaciated, relatively flat lake plain on the edges of Old Lake

Whittlesly, Lake Maumee, and Lake Warren. The area's physiographic province is near the boundary of the Appalachian Plateau and the Central Lowland province (White 1943). More specifically, the GMC-FBD site is situated near the boundary of the Interior Lowlands physiographic province, at an elevation of approximately 750 feet above mean sea level, an area of relatively flat-lying sedimentary rock from the Devonian and Mississippian ages (White 1943).

The geology in the GMC-FBD site vicinity is divided into four stratigraphic units, based on boring logs of existing on-site monitoring wells (see Appendix E for soil boring logs of the site). The uppermost unit consists of soft, light brown to greenish-gray silty clay till, sand, and gravel deposited during the Wisconsinan glacial advance approximately 10,000 years ago. The unit thickness ranges from 6 to 14 feet. Underlying the till deposits is the Orangeville Shale that consists of soft, light greenish-gray shale. This unit is not found under most of the site, but has been identified under the southeast portion of the site at a depth of approximately 5 feet. The Berea Sandstone underlies the glacial drift or the Orangeville Shale and is described as a hard, fine-grained sandstone, with occasional thin shale interbeds. The glacial deposits and the Berea Sandstone are hydraulically connected and together form the aquifer of concern (AOC). Wells in the area of the site draw from the Berea Sandstone (see Appendix F for well logs of the area of the site).

Underlying the Berea Sandstone is the Bedford Shale, which is 50 to 90 feet in thickness. It is described as a gray to reddish, silty shale with some thin, sandy horizons (Mustafa 1990). The domestic wells drawing from the AOC within a 3-mile radius of the site range in depth from 25 to 30 feet. According to local well logs, no continuous impermeable confining layers exist throughout a 3-mile radius of the site. The direction of groundwater flow is not known, but is assumed to be in a northeasterly direction because the surface topography in the area gently descends toward the Black River, which is located approximately 3/4 miles east of the site. The nearest drinking water well to the GMC-FBD site is located approximately 3,500 feet to the northwest. The aquifer used for drinking purposes in the area has an average yield of 12 to 15 gallons per minute, according to area well logs.

Residents of the city of Elyria obtain drinking water pumped from Lake Erie, which is approximately 7 miles north of the GMC-FBD site. Many residents outside Elyria city limits have the option of purchasing drinking water from Elyria or from the Rural Lorain County Water Authority, which also distributes water pumped from Lake Erie (Kuzak 1986).

Potential targets of groundwater contamination include residents outside Elyria city limits who use private wells that draw drinking water from the AOC. A house count from United States Geological Survey (USGS) topographic maps of the area of the site (USGS 1963, 1963a, 1969, 1969a) showed 668 houses within a 3-mile radius of the site and outside municipal and rural water supply boundaries. This number was then multiplied by a persons-per-household value of 2.69 for Lorain County, Ohio (U.S. Bureau of the Census 1982), which yields a groundwater target population of 1,991 persons.

5.3 SURFACE WATER

The former outfall located at the northeast corner of disposal area C discharged into the same drainage ditch that is currently used to carry storm water runoff to the Black River. Therefore, TCL compounds and TAL analytes that might have been detected at the discharge point of the ditch into the Black River could not have been conclusively attributed to the GMC-FBD site. As a result, FIT did not sample surface water or sediment from the Black River during the SSI.

Because waste at the site is primarily covered or buried, an overland migration route for TCL compounds and TAL analytes from the site to surface water does not appear to exist; however, a potential for TCL compounds and TAL analytes to migrate from the site to the Black River exists, based on the following information.

- TCL compounds and TAL analytes were detected in on-site soil samples.

- Wastewater was discharged directly to the drainage ditch through outfall 001 between 1956 and 1988.

- The primary constituents of wastewaters derived from plating operations at the General Motors plant were chromium, cadmium, nickel, and cyanide.

- TCL compounds and TAL analytes may also migrate to the Black River via groundwater base flow.

The Black River is used for recreational purposes. However, because no surface water intakes exist within a 3-mile radius of the site, there is no target population (U.S. EPA 1984).

5.4 AIR

A release of TCL compounds or TAL analytes to the air was not documented during the SSI of the GMC-FBD site. During the reconnaissance inspection, FIT site-entry instruments (OVA 128, HNu, oxygen meter, explosimeter, and hydrogen cyanide detector) did not detect levels above background concentrations at the site. In accordance with the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

A potential does not exist for TCL compounds and TAL analytes to migrate from the site via windblown particulates because of adequate vegetative cover at the site.

5.5 FIRE AND EXPLOSION

According to federal, state, and local file information reviewed by FIT, and an interview with the Elyria fire chief, Schue, no documentation exists of an incident of fire or explosion at the site (Schue 1990). According to FIT observations and site-entry equipment readings, no potential for fire or explosion existed at the site at the time of the SSI.

5.6 DIRECT CONTACT

According to federal, state, and local file information reviewed by FIT, observations made during the SSI, and the interview with the site representatives, no incidents of direct contact with TCL compounds or TAL analytes at the GMC-FBD site have been documented. A potential does

not appear to exist for the public to be exposed to direct contact with TCL compounds and TAL analytes detected on-site, based on the following observations.

- The site is fenced, and has a gate that is locked 24 hours per day.
- The on-site disposal areas are covered and vegetated.

Fauna, however, could potentially become exposed to TCL compounds and TAL analytes through the ingestion of contaminated flora on-site. FIT observed deer on-site.

6. REFERENCES

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Kuzak, Dale, February 24, 1986, Superintendent of Water Distribution, Elyria Water Department, telephone conversation, contacted by Pat Patrella of E & E.

Mustafa, Ahmed, March 30, 1990, Groundwater Division, Northeast District Office, OEPA, Comprehensive Groundwater Monitoring Evaluation of General Motors's Inland Fisher Guide Division.

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Schue, June 21, 1990, Fire Chief, Elyria Fire Department, telephone conversation, contacted by Bill Shaeffer of E & E.

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U.S. EPA, June 2, 1981, Notification of Hazardous Waste Site form, prepared by H. H. Linz, Plant Manager, General Motors.

_____, March 30, 1984, Potential Hazardous Waste Site Preliminary Assessment, for the GMC-FBD site, U.S. EPA ID: OHD004201091, prepared by Catherine McCord, Northeast District Office, OEPA.

_____, February 12, 1988, Office of Solid Waste and Emergency Response, Pre-Remedial Strategy for Implementing SARA, Directive number 9345.2-01, Washington, D.C.

USGS, 1963, Avon, Ohio Quadrangle, 7.5 Minute Series: 1:24,000.

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6488:9

A

APPENDIX A

SITE 4-MILE RADIUS MAP

SDMS US EPA Region V

Imagery Insert Form

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4-MILE RADIUS MAP

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B

APPENDIX B

U.S. EPA FORM 2070-13

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: OOO4201091

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
GMC - FISHER BODY DIVISION	1400 LOWELL STREET				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
ELYRIA	OH	44036	LORAIN	093	13

09 COORDINATES: LATITUDE 41° 22' 10.0"N | LONGITUDE 082° 08' 20.0"W

10 TYPE OF OWNERSHIP (Check one): ☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
9, 18, 90 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1946 (BEGINNING YEAR) , 1988 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR ECOLOGY & ENVIRONMENT (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
CINDY SCHULTZ	ENV. HEALTH SPECIALIST	E+E	(312)663-9415
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
RANDY LIVINGSTON	GEOGRAPHER	E+E	(312) 663-9415
MIKE WALTERS	GEOGRAPHER	E+E	(312)663-9415
JENNIFER DUBAY	NATURAL RESOURCE MAN.	E+E	(312)663-9415
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
PHILLIP KIENLE - GMC	SR. ENV. ENGINEER	1400 LOWELL ST ELYRIA, OH 44036	(313) 578-3006
LOWELL METZGER O.H. MATERIAL	CONSULTANT	16406 U.S. ROUTE 224E FINDLAY, OH	419-423-3526
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	0800 - 1735	70° SUNNY

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
AHMET MUSTAFA	OEPA - NE DISTRICT OFFICE	(216) 425-9171

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
BRAD STIMPLE	U.S. EPA	E+E/FIT	312-663-9415	1, 3, 91 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D004201091

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER (Specify) _____
- [ ] E. SLURRY
- [ ] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

- TONS: UNKNOWN
- CUBIC YARDS: UNKNOWN
- NO. OF DRUMS: UNKNOWN

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [X] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN		
OLW	OILY WASTE			
SOL	SOLVENTS	UNKNOWN		SEE TABLE 4-1 AND
PSD	PESTICIDES	"		NARRATIVE
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS	UNKNOWN		
ACD	ACIDS	"		
BAS	BASES	"		
MES	HEAVY METALS	"		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	SEE TABLES 4-1		IN SECTION 4 "ANALYTICAL		
				RESULTS"	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

FIT SSI CONDUCTED 9/18/90
DATA ANALYSIS OF FIT-COLLECTED SAMPLES
FIT FILE INFO. / OEPA FILE INFO.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D004201091

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1991 — 04 NARRATIVE DESCRIPTION

SEE SUBSECTION 5.2 "GROUNDWATER"

01 ■ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: UNKNOWN — 04 NARRATIVE DESCRIPTION

SEE SUBSECTION 5.3 "SURFACE WATER"

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

SEE SUBSECTION 5.4 "AIR"

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

SEE SUBSECTION 5.5 "FIRE AND EXPLOSION"

01 ■ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

SEE SUBSECTION 5.6 "DIRECT CONTACT"

01 ■ F. CONTAMINATION OF SOIL — 02 ■ OBSERVED (DATE: 9/18/90) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 65,000 C.Y. (ACRES) — 04 NARRATIVE DESCRIPTION

SEE SUBSECTION 5.2 "GROUNDWATER" AND SECTION 4 "ANALYTICAL RESULTS"

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1991 — 04 NARRATIVE DESCRIPTION

SEE SUBSECTIONS 5.2 "GROUNDWATER" + 5.3 "SURFACE WATER"

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

SITE IS INACTIVE

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1991 — 04 NARRATIVE DESCRIPTION

REFER TO "A" ABOVE & G

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: D004201O9

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ■ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
TAL ANALYTES & TCL COMPOUNDS DETECTED IN SOIL SAMPLES, COULD POTENTIALLY EFFECT VEGETATION ON-SITE

01 ■ K. DAMAGE TO FAUNA — 02 ■ OBSERVED (DATE: 9/18/90) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
FAUNA COULD BE EXPOSED TO TCL COMPOUNDS AND TAL ANALYTES THROUGH THE INGESTION OF CONTAMINATED FLORA, DESPITE THE PRESENCE OF A FENCE. DEER WERE OBSERVED WITHIN THE SITE PERIMETER

01 ■ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
THE FOOD CHAIN COULD BE INDIRECTLY AFFECTED THROUGH THE BIOACCUMULATION OF TCL COMPOUNDS AND TAL ANALYTES

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1991
04 NARRATIVE DESCRIPTION
WASTE BURIED ON-SITE, CONTAMINATED AT SIGNIFICANTLY HIGH TCL COMPOUND AND TAL ANALYTE LEVELS. NO LINER IS PRESENT BENEATH IMPOUNDMENTS.

01 ■ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: 9/18/90) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
NONE OBSERVED

01 ■ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ■ OBSERVED (DATE: 9/18/90) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
REFER TO SECTIONS 2.3 AND 5.3

01 ■ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
SEE SUBSECTION 2.3 "SITE HISTORY"

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
NONE OBSERVED BY FIT DURING THE 9/18/90 SSI

III. TOTAL POPULATION POTENTIALLY AFFECTED: 1991

IV. COMMENTS
NONE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
FIT SSI CONDUCTED 9/18/90
DATA ANALYSIS OF FIT-COLLECTED SAMPLES
FIT FILE INFORMATION / OEPA FILE INFO.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D004201091

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☒ A. NPDES	OEPA 3IS00000I CD	9/30/85	9/27/90	WITHDREW PERMIT ON MAY 19, 1989
☐ B. UIC				
☒ C. AIR				VARIOUS OPERATIONAL PERMITS
☐ D. RCRA				
☒ E. RCRA INTERIM STATUS	OHD004201091			STORAGE AND / POST CLOSURE
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☒ A. SURFACE IMPOUNDMENTS	~65,000	CY
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	~40,000	CY
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCINERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER N/A (Specify)

05 OTHER
- ☒ A. BUILDINGS ON SITE PARCEL A - 3, PARCEL B - 0

06 AREA OF SITE
PARCEL B - 85 (Acres)
PARCEL A - 141

07 COMMENTS

- SITE CONSISTS OF 3 PREVIOUS UNREGULATED DISPOSAL
- AREAS, AND ONE RCRA REGULATED CAPPED LANDFILL

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

NONE OBSERVED BY FIT DURING THE 9/18/90 SSI.
(3 DISPOSAL AREAS)

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

FENCED AND LOCKED. MAJORITY OF SITE IS CAPPED AND VEGETATED (PARCEL B)

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

FIT SSI CONDUCTED 9/18/90
DATA ANALYSIS OF FIT COLLECTED SAMPLES
FIT FILE INFORMATION / OEPA FILE INFO.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: D004201091

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL
COMMUNITY	A. ☒	B. ☐
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☒
D. ☐ UNKNOWN	E. ☐	F. ☐

03 DISTANCE TO SITE
A. ~7 (mi)
B. 3500 FT (feet)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)
☐ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE
COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)

02 POPULATION SERVED BY GROUND WATER: 1991 - 3 MILE RADIUS
03 DISTANCE TO NEAREST DRINKING WATER WELL: 3500 FT (est)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
25-30 (ft)	UNKNOWN	5-8 (ft)	5-12 g.p.m. (gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (Including aquifer, depth, and location relative to populations and buildings)
ELYRIA UTILIZES WATER PUMPED FROM LAKE ERIE APPROX 7 MILES AWAY. RESIDENTS OUTSIDE ELYRIA CITY LIMITS MAY BUY WATER FROM ELYRIA OR NEIGHBORING COMMUNITIES. SMALL PORTIONS DRAW FROM PRIVATE WELLS.

10 RECHARGE AREA
☒ YES ☐ NO
COMMENTS: PERCOLATION OF PRECIPITATION TO GROUNDWATER

11 DISCHARGE AREA
☒ YES ☐ NO
COMMENTS: LOCAL LAKES, DITCHES RIVERS MAY ACT AS DISCHARGE AREAS.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)
☒ A. RESERVOIR, RECREATION, DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
BLACK RIVER	☐	~3/4 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 5626 NO. OF PERSONS	B. 26530 NO. OF PERSONS	C. 46433 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 1/8 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: 9936

04 DISTANCE TO NEAREST OFF-SITE BUILDING: 1/8 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

SEE SUBSECTION 5.2 "GROUNDWATER"

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: D004201091

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. 10^{-6} - 10^{-8} cm/sec ☐ B. 10^{-4} - 10^{-6} cm/sec ☒ C. 10^{-4} - 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} - 10^{-6} cm/sec) ☒ C. RELATIVELY PERMEABLE (10^{-2} - 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
15-25 (ft)	UNKNOWN (ft)	UNKNOWN	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
4.95 (in)	2 (in)	≤3 %	EAST	~3 %

09 FLOOD POTENTIAL
AREA OF MINIMAL FLOODING
SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY
N/A

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. N/A (mi) OTHER: B. ~1 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
N/A (mi)
ENDANGERED SPECIES: N/A

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 1/4-1/2 (mi)	B. 1/2-1/4 (mi)	C. N/A (mi)	D. ADJACENT (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

SEE SUBSECTION 3.3 "RECONNAISSANCE OBSERVATIONS" AND APPENDIX A "SITE 4 MILE RADIUS MAP"

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

FIT SSI CONDUCTED 9/18/90
FIT FILE INFORMATION
OEPA FILE INFORMATION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D004201091

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE		/	
AIR			
RUNOFF		TCL COMPOUNDS	
SPILL		S-CUBED; SAN DIEGO, CA.	
SOIL	7	TAL ANALYTES	AVAILABLE
VEGETATION		BETZ LABORATORIES; THE WOODLANDS, TX.	
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
OVA 128	NO DEVIATION FROM BACKGROUND
HNU / 10.2 PROBE	NO DEVIATION FROM BACKGROUND
O2 / EXPLOSIMETER COMBO METER	NO DEVIATION FROM BACKGROUND
MONITOX	NO DEVIATION FROM BACKGROUND
MONIOR 4	NOT AVAILABLE.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND □ AERIAL

02 IN CUSTODY OF E+E
(Name of organization or individual)

03 MAPS ■ YES □ NO

04 LOCATION OF MAPS E+E, 111 W. JACKSON BLVD., CHICAGO, IL. 60604

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

NONE

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

FIT SSI CONDUCTED 9/18/90
FIT FILE INFORMATION
OEPA FILE INFORMATION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: D004201091

II. CURRENT OWNER(S)

01 NAME: GMC - INLAND FISHER GUIDE | 02 D+B NUMBER: UNKNOWN
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 6600 E. 12 MILE ROAD | 04 SIC CODE: UNKNOWN
05 CITY: WARREN | 06 STATE: MI | 07 ZIP CODE:

01 NAME: NORTHERN OHIO INDUSTRIAL PARK | 02 D+B NUMBER: N/A
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 1400-1438 LOWELL ST | 04 SIC CODE: N/A
05 CITY: ELYRIA | 06 STATE: OH | 07 ZIP CODE: 44036

01 NAME: N/A | 02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): | 04 SIC CODE:
05 CITY: | 06 STATE: | 07 ZIP CODE:

01 NAME: N/A | 02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): | 04 SIC CODE:
05 CITY: | 06 STATE: | 07 ZIP CODE:

PARENT COMPANY (if applicable)

08 NAME: GENERAL MOTORS CORP. | 09 D+B NUMBER: N/A
10 STREET ADDRESS (P.O. Box, RFD #, etc.): 3044 W. GRAND BLVD. | 11 SIC CODE: N/A
12 CITY: DETROIT | 13 STATE: MI | 14 ZIP CODE: 48202

08 NAME: N/A | 09 D+B NUMBER:
10 STREET ADDRESS (P.O. Box, RFD #, etc.): | 11 SIC CODE:
12 CITY: | 13 STATE: | 14 ZIP CODE:

08 NAME: N/A | 09 D+B NUMBER:
10 STREET ADDRESS (P.O. Box, RFD #, etc.): | 11 SIC CODE:
12 CITY: | 13 STATE: | 14 ZIP CODE:

08 NAME: N/A | 09 D+B NUMBER:
10 STREET ADDRESS (P.O. Box, RFD #, etc.): | 11 SIC CODE:
12 CITY: | 13 STATE: | 14 ZIP CODE:

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME: UNKNOWN | 02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): | 04 SIC CODE:
05 CITY: | 06 STATE: | 07 ZIP CODE:

01 NAME: UNKNOWN | 02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): | 04 SIC CODE:
05 CITY: | 06 STATE: | 07 ZIP CODE:

01 NAME: UNKNOWN | 02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): | 04 SIC CODE:
05 CITY: | 06 STATE: | 07 ZIP CODE:

IV. REALTY OWNER(S) (if applicable; list most recent first)

01 NAME: N/A | 02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): | 04 SIC CODE:
05 CITY: | 06 STATE: | 07 ZIP CODE:

01 NAME: N/A | 02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): | 04 SIC CODE:
05 CITY: | 06 STATE: | 07 ZIP CODE:

01 NAME: N/A | 02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): | 04 SIC CODE:
05 CITY: | 06 STATE: | 07 ZIP CODE:

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

FIT SSI CONDUCTED 9/18/90
FIT FILE INFORMATION / OEPA FILE INFO.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: D004201091

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER	04 SIC CODE
PLANT IS INACTIVE		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (if applicable)

10 NAME	11 D+B NUMBER	13 SIC CODE
N/A		

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE
	/		

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE	08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD	10 NAME	11 D+B NUMBER	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	14 CITY	15 STATE	16 ZIP CODE
GMC-INLAND FISHER GUIDE	UNKNOWN	1400 LOWELL ST	UNKNOWN	ELYRIA	OH	44036	36	GMC	GENERAL MOTORS CORP.	N/A	3044 W. GRAND BLVD.	N/A	DETROIT	MI	48202
N/A									N/A						
N/A									N/A						

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

FIT SSI. CONDUCTED 9/18/90
FIT FILE INFORMATION
OEPA FILE INFORMATION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	D004201091

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
GMC-FISHER BODY DIV.	UNKNOWN
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
1400 LOWELL ST	UNKNOWN
05 CITY	06 STATE / 07 ZIP CODE
ELYRIA	OH / 44036

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
UNKNOWN			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

FIT SSI CONDUCTED 9/18/90

FIT FILE INFORMATION

OEPA FILE INFORMATION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE: OH | 02 SITE NUMBER: OOO42 01091

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: OH | 02 SITE NUMBER: OD004201091

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☒ S. CAPPING/COVERING — 02 DATE UNKNOWN — 03 AGENCY _____
04 DESCRIPTION
CLAY

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☒ Y. LEACHATE TREATMENT — 02 DATE UNKNOWN — 03 AGENCY _____
04 DESCRIPTION
PRIMARY AND SECONDARY — ENGINEERED LANDFILL

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

NONE

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	D004201091

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION [X] YES [ ] NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

SEE SUBSECTION 2.3 "SITE HISTORY"

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

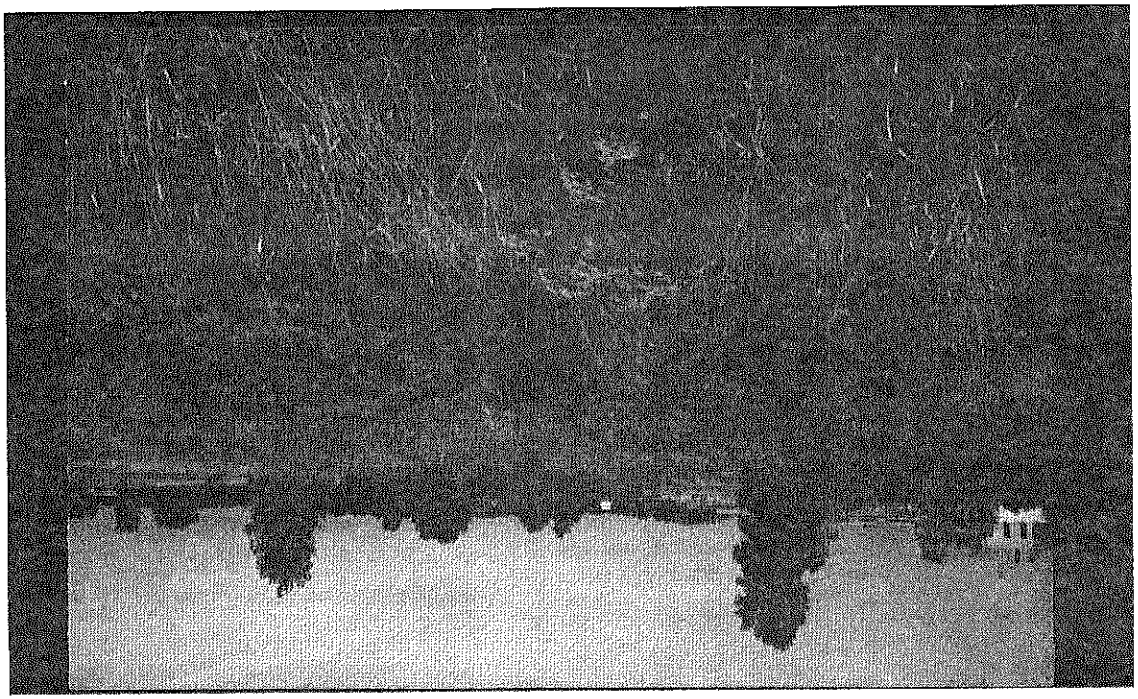
FIT FILE INFORMATION

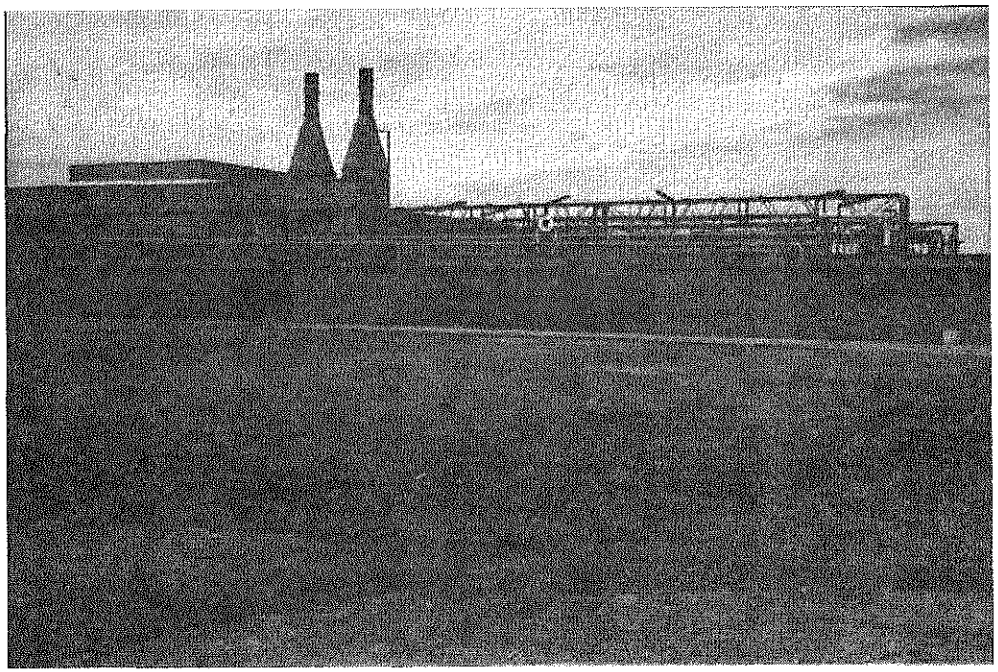
OEPA FILE INFORMATION

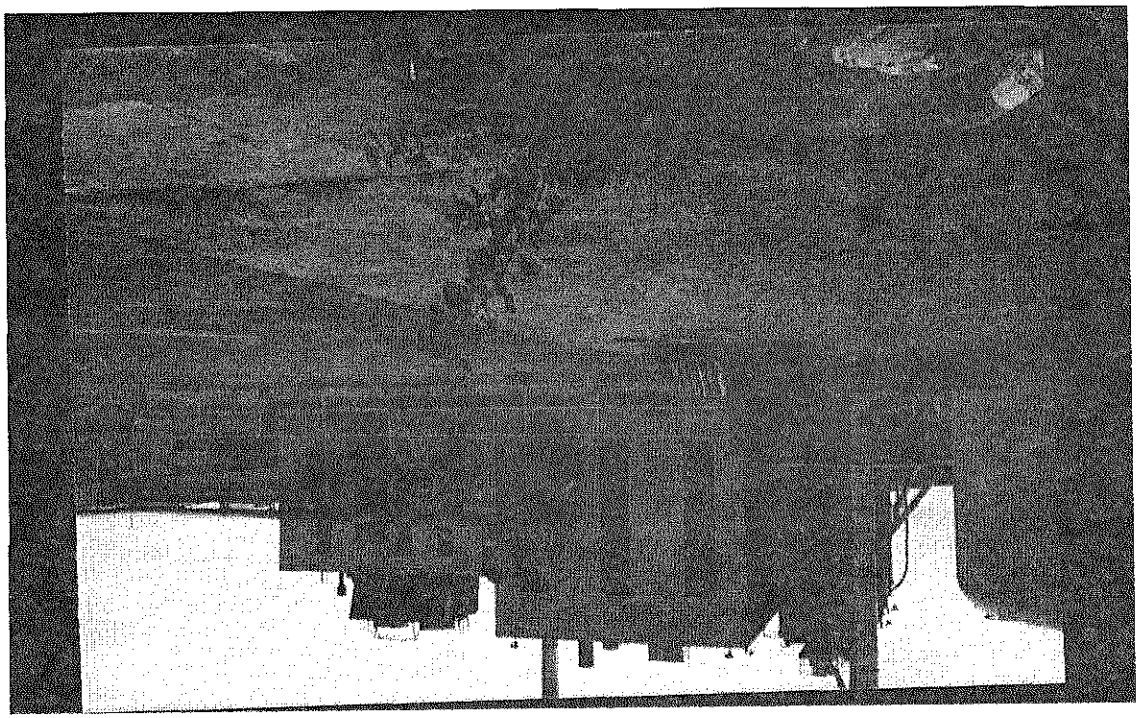
C

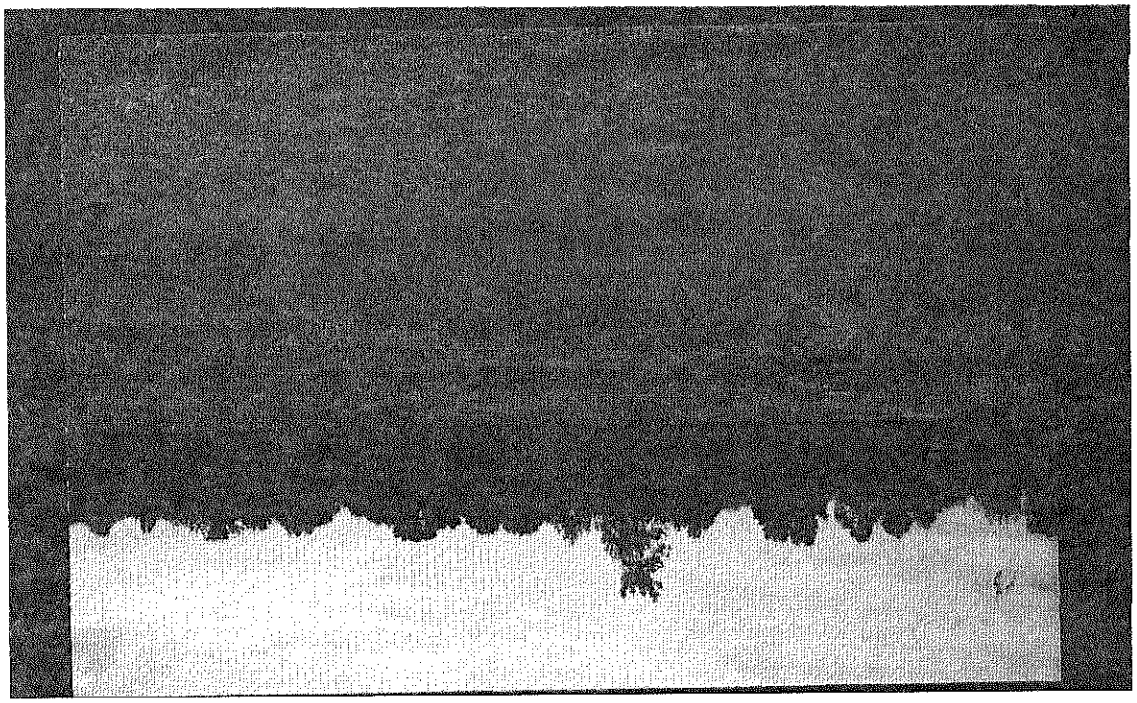
APPENDIX C

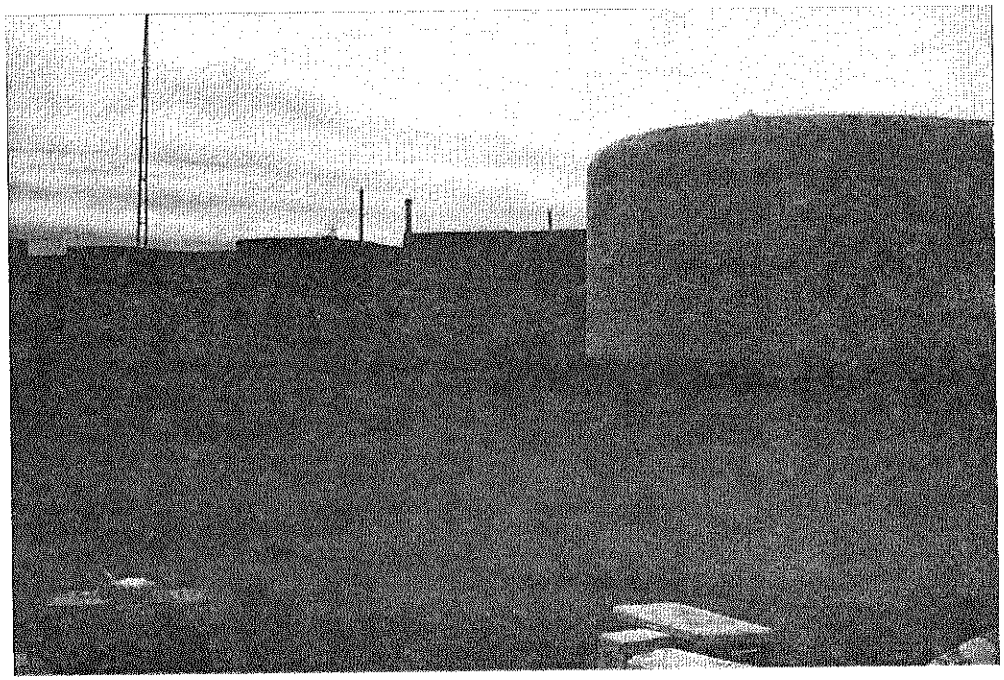
FIT SITE PHOTOGRAPHS

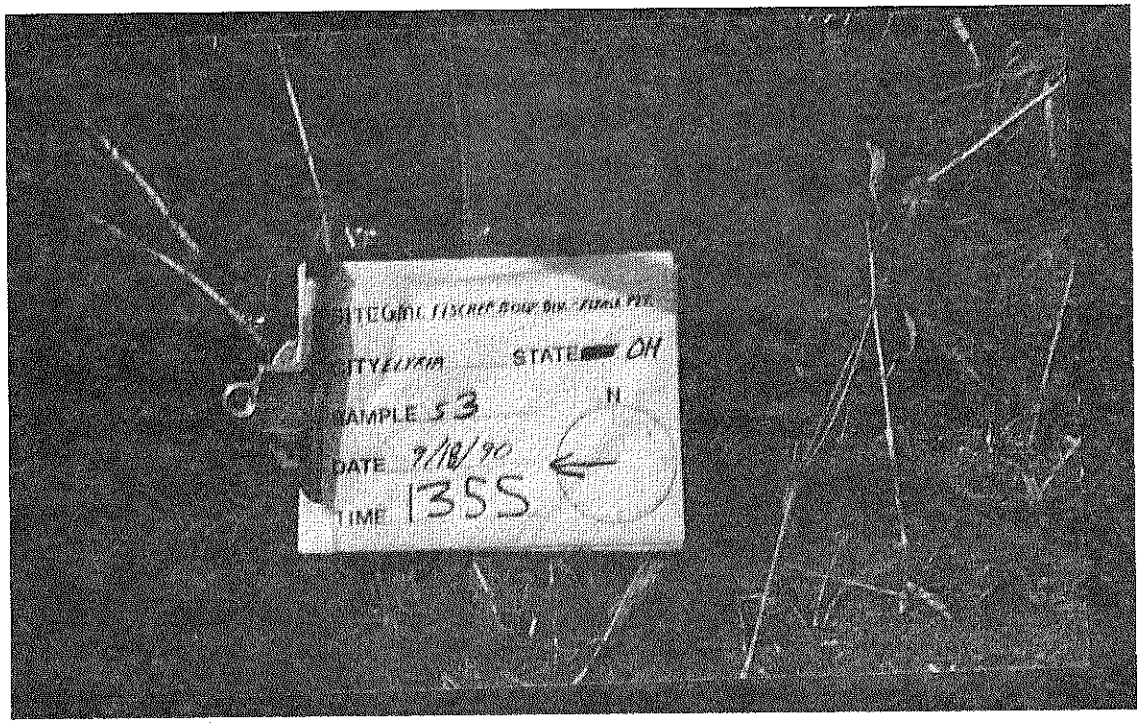


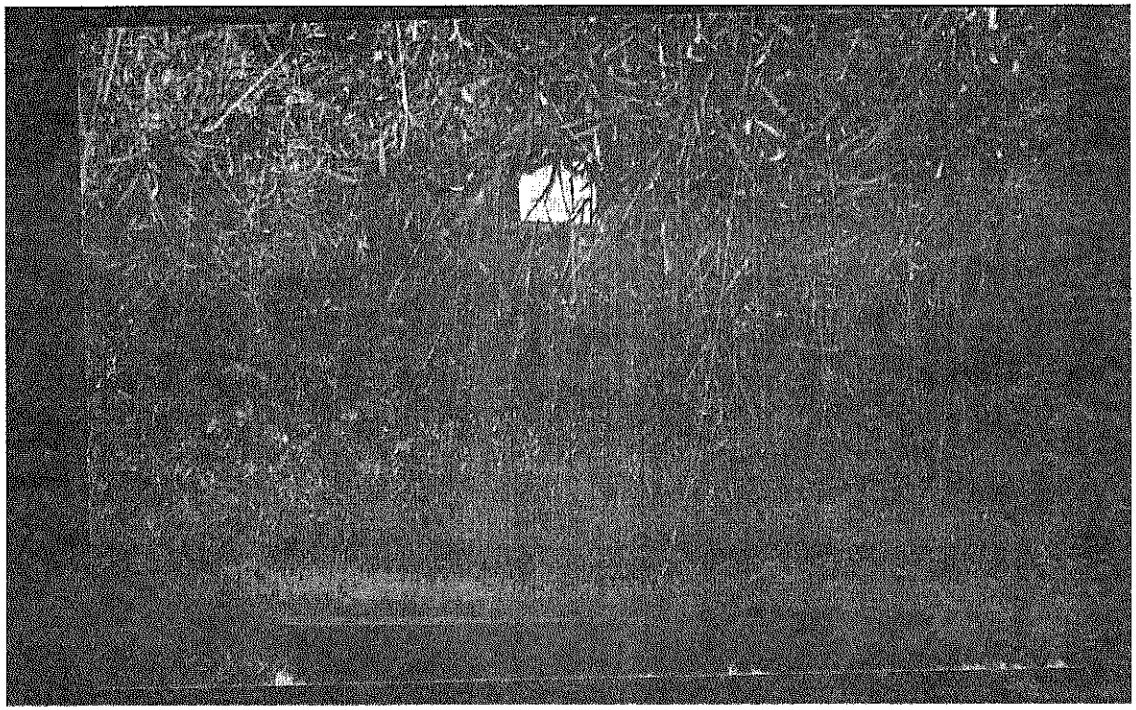


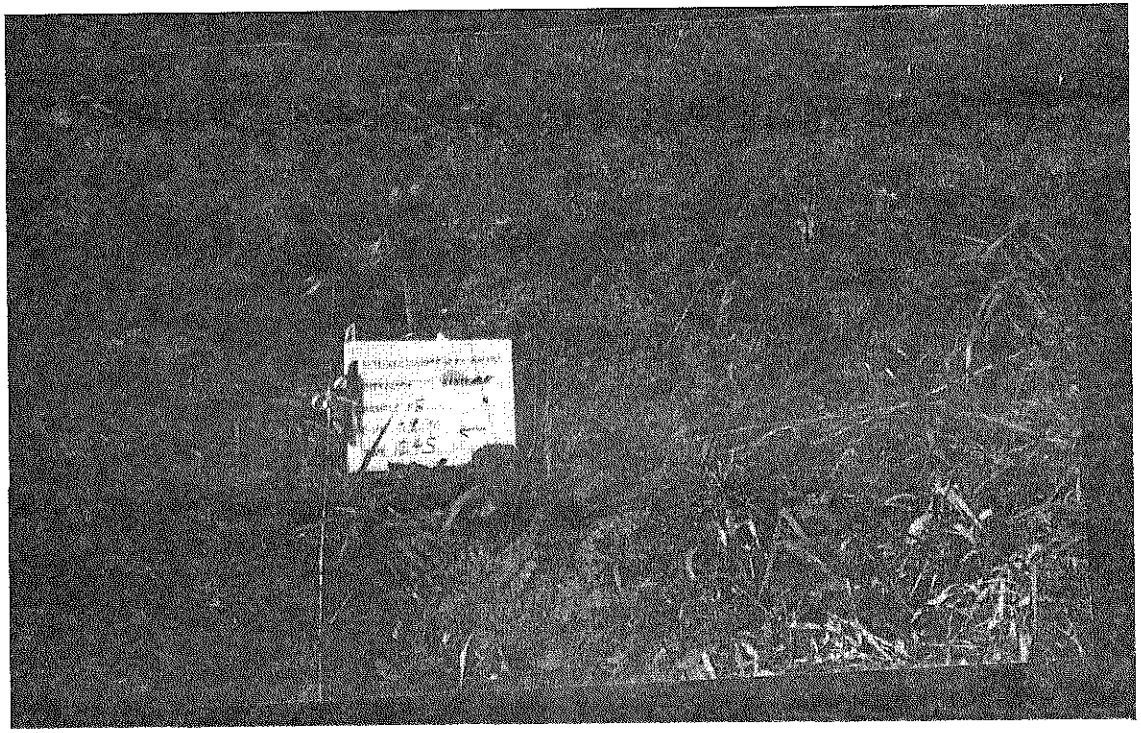


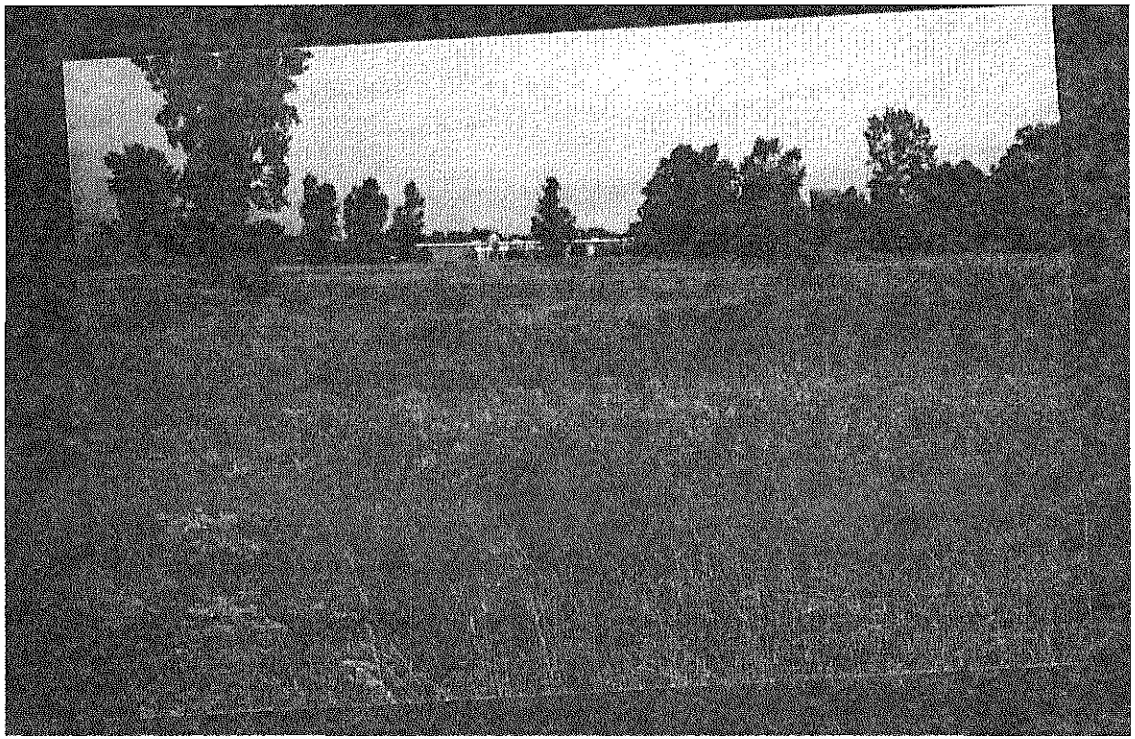


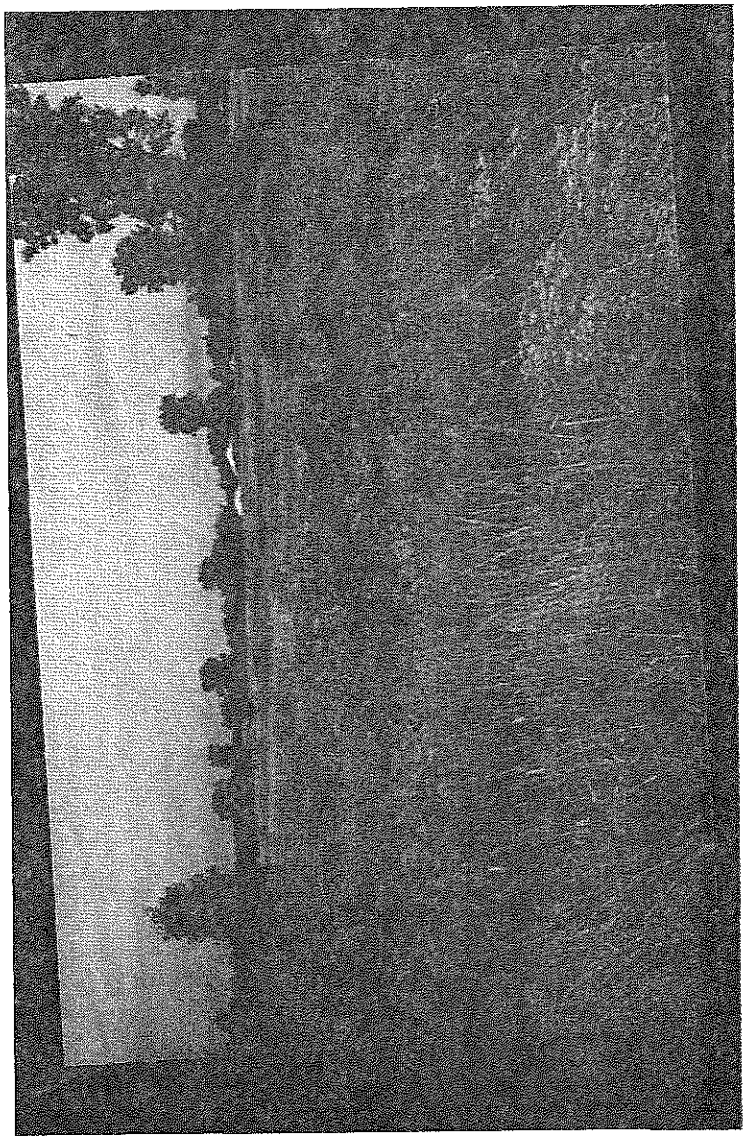


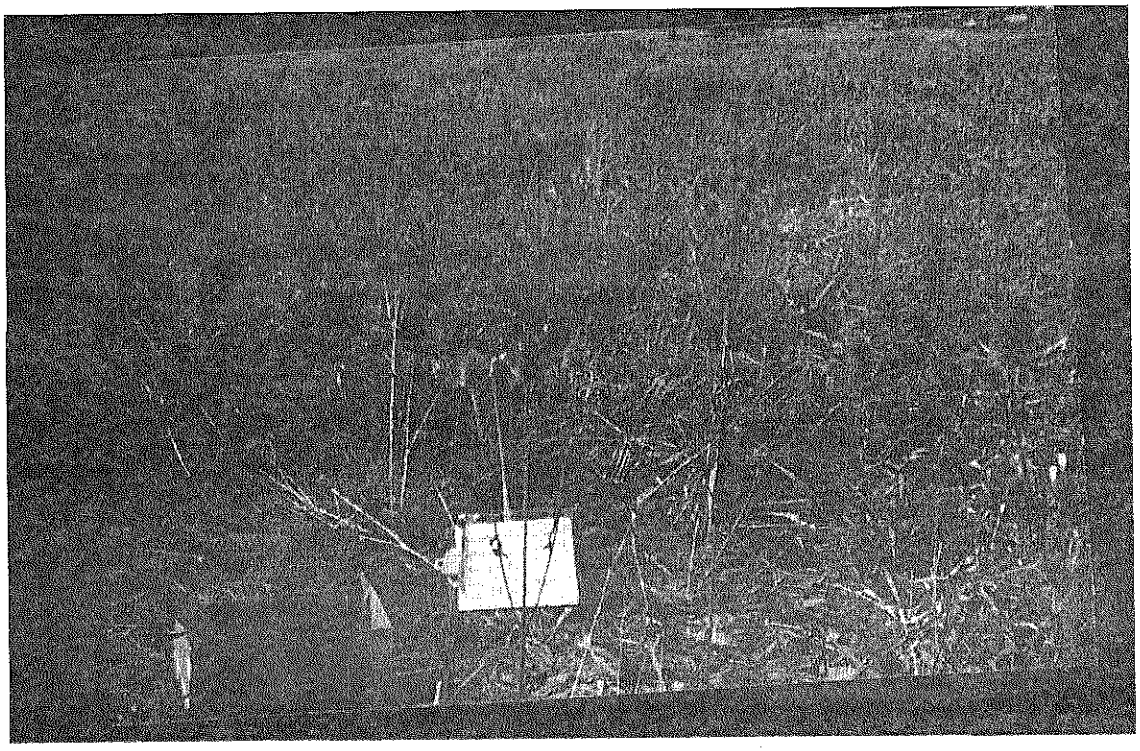

STATE OH
SAMPLE 53
DATE 7/18/90
TIME 1355

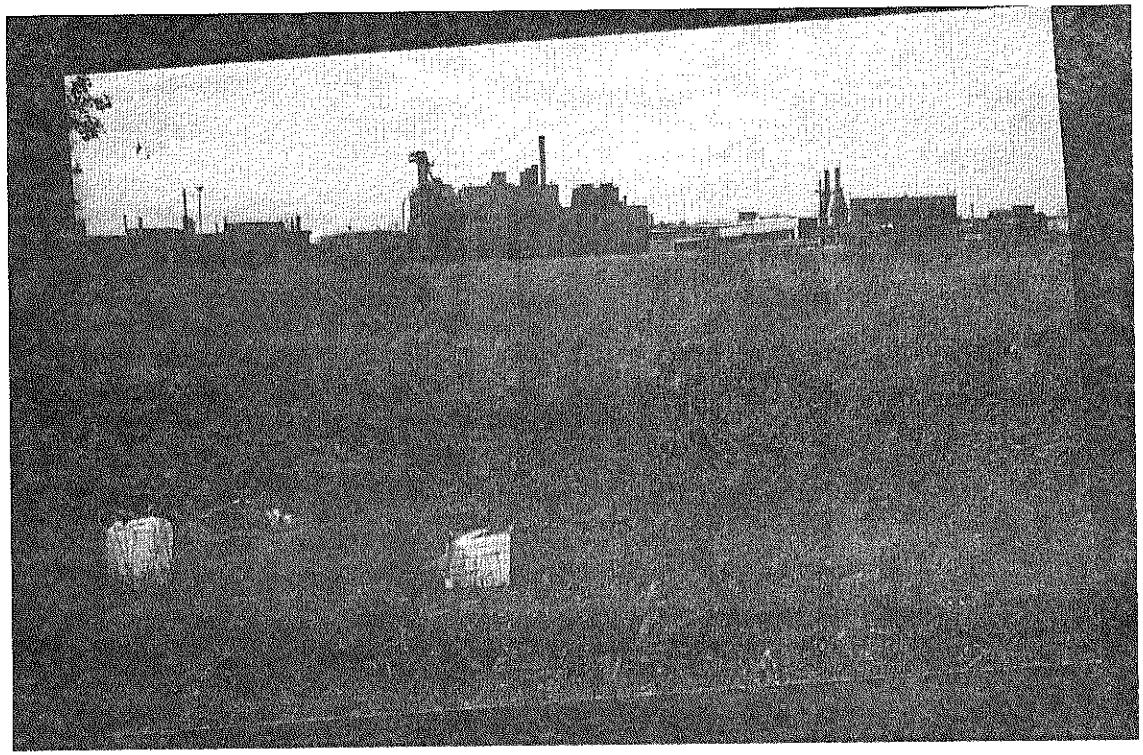


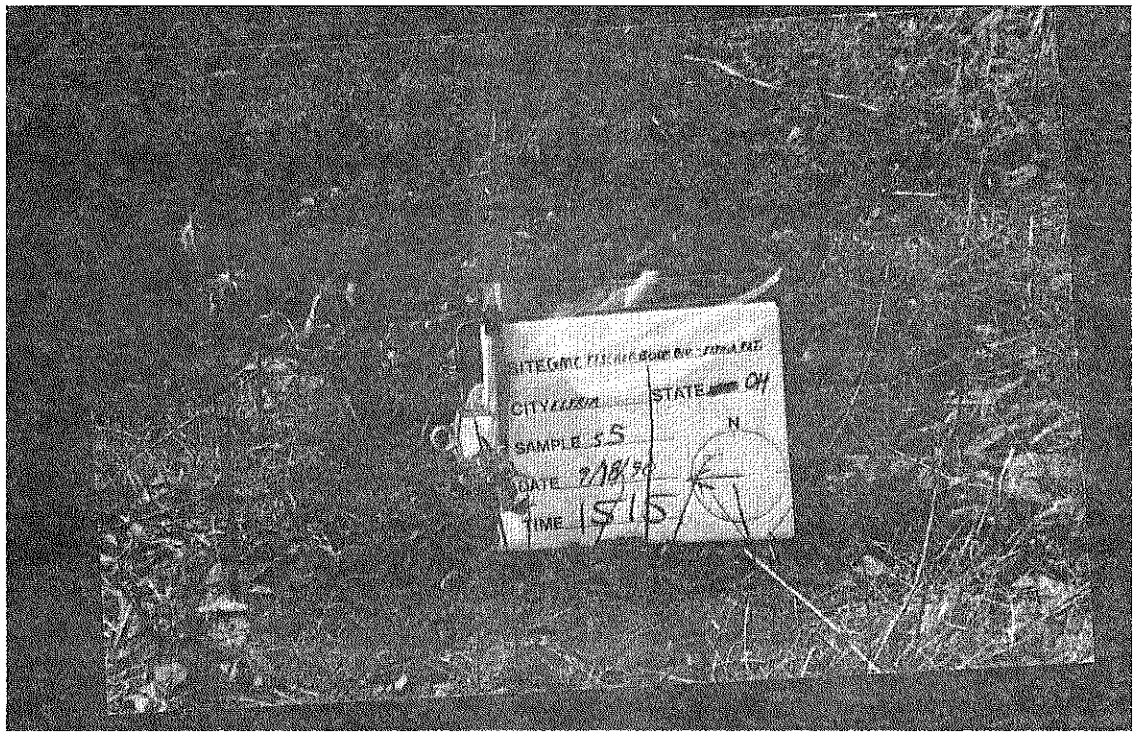


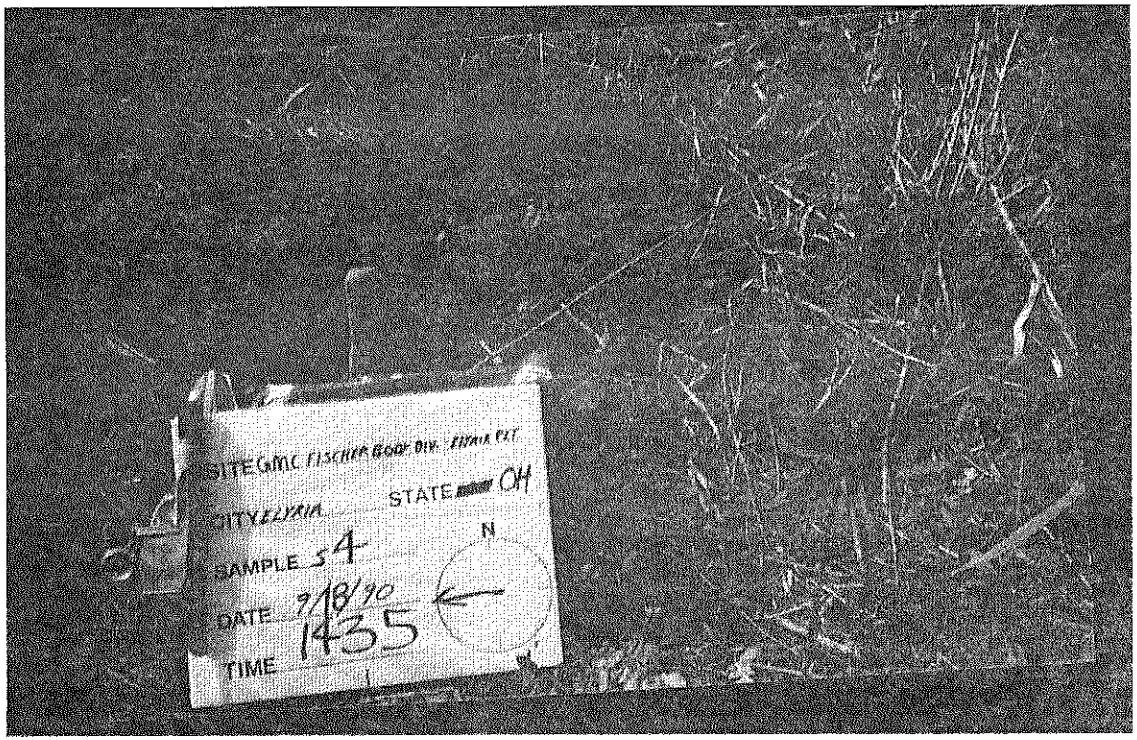


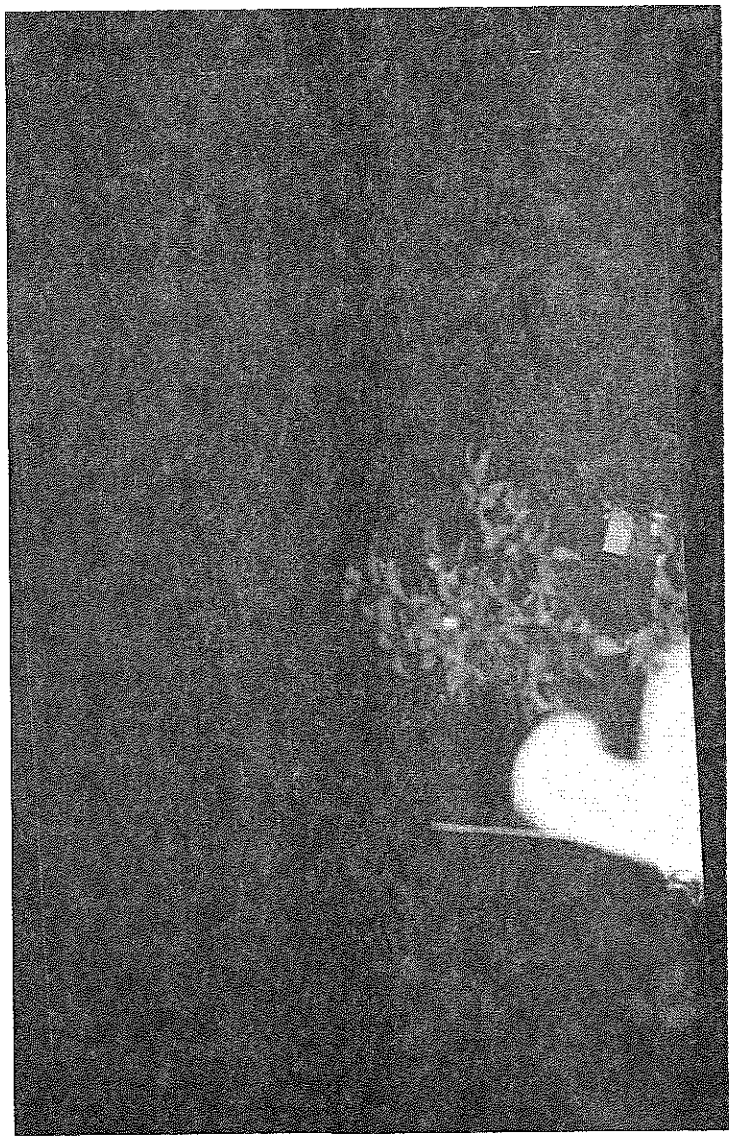


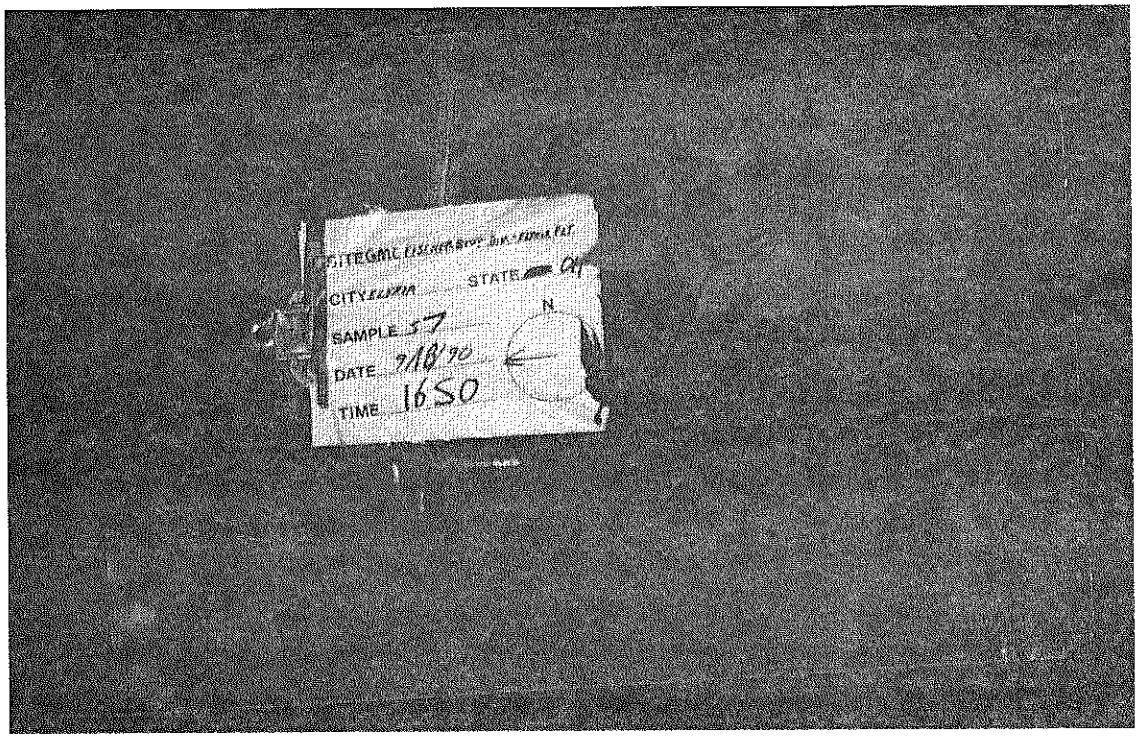





CITY
STATE OH
N
SAMPLE SS
DATE 9/18/91
TIME 1515


SITE GMC FISCHER BODY DIV. ELYRIA PLT
CITY ELYRIA
STATE OH
SAMPLE S4
N
DATE 9/18/90
TIME 1435

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CITY
STATE
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DATE 7/18/90
TIME 1650
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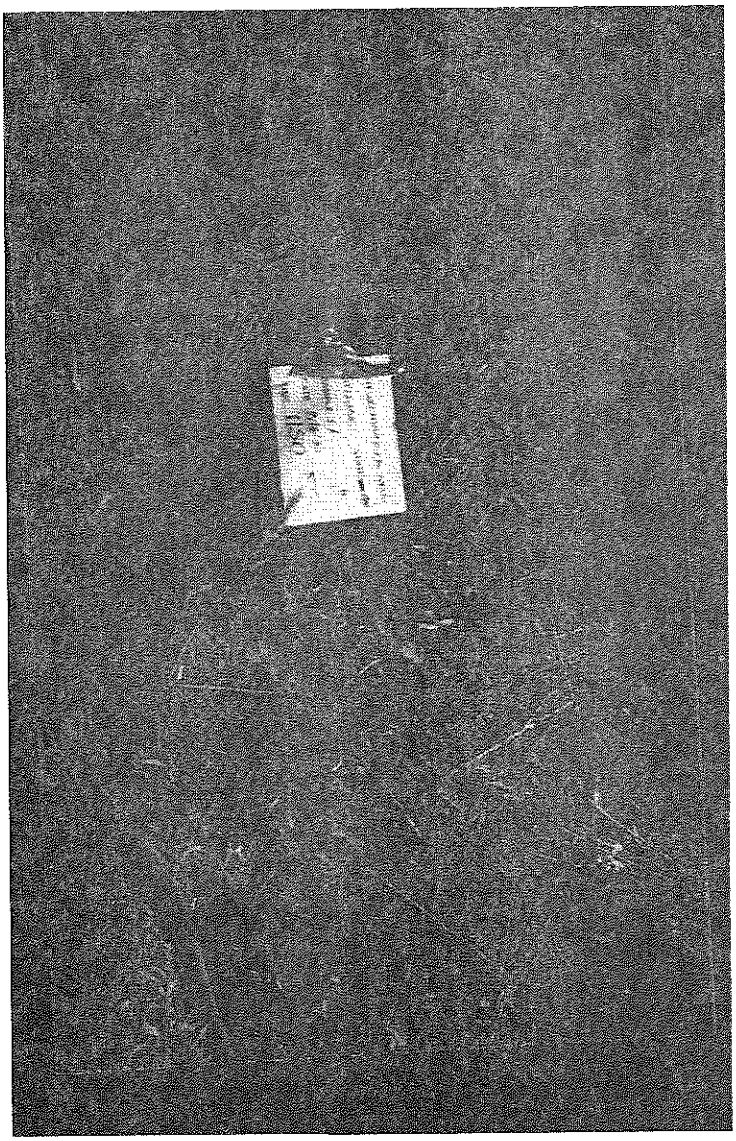
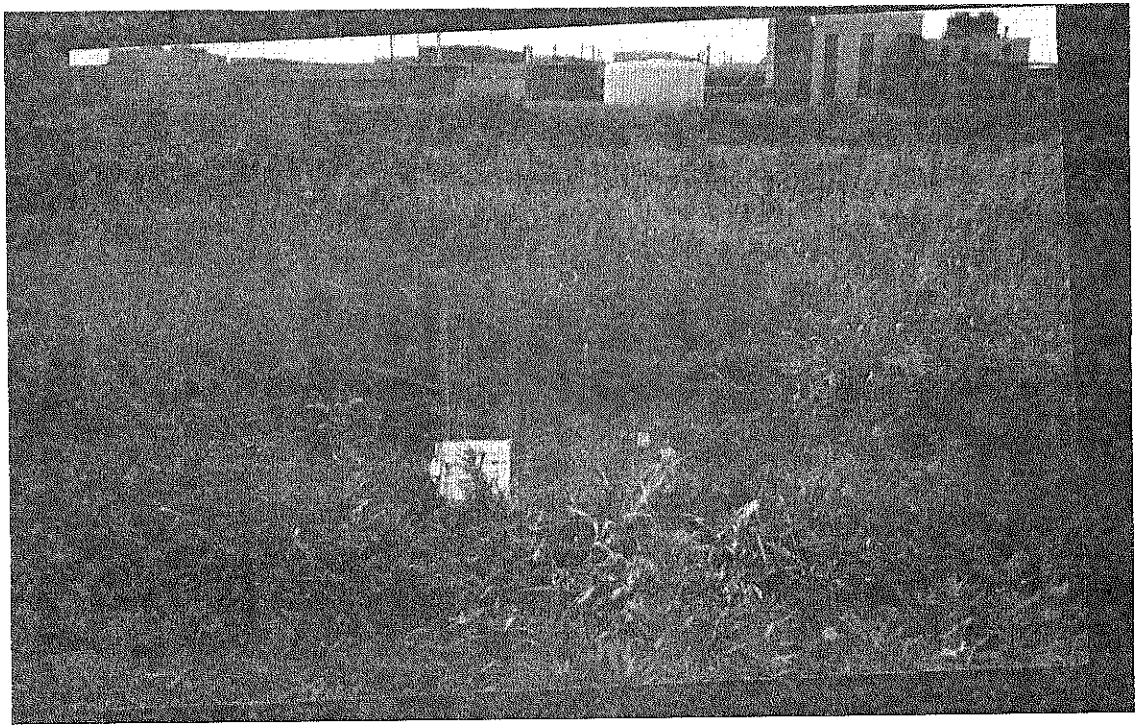
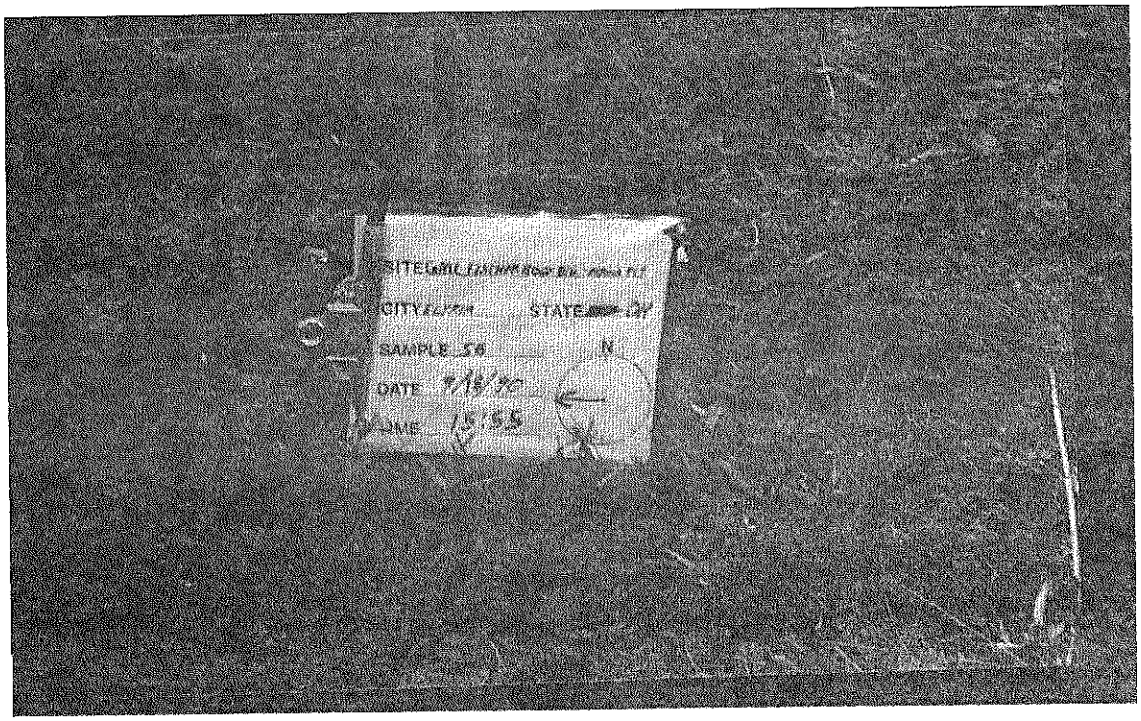
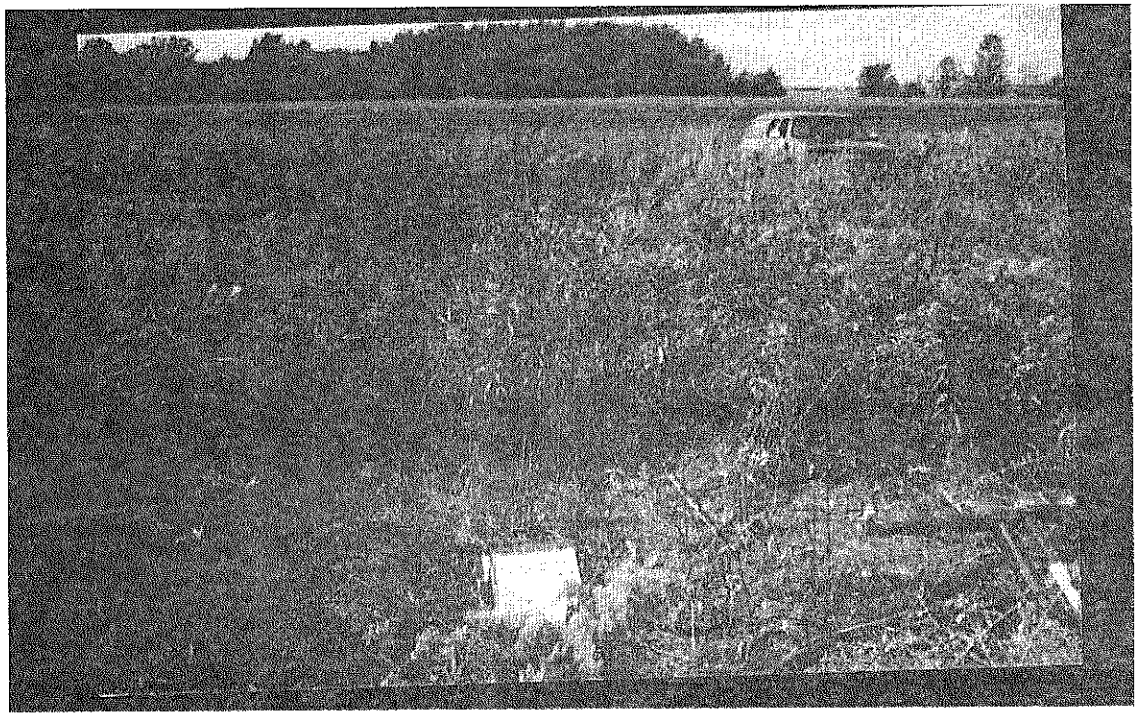
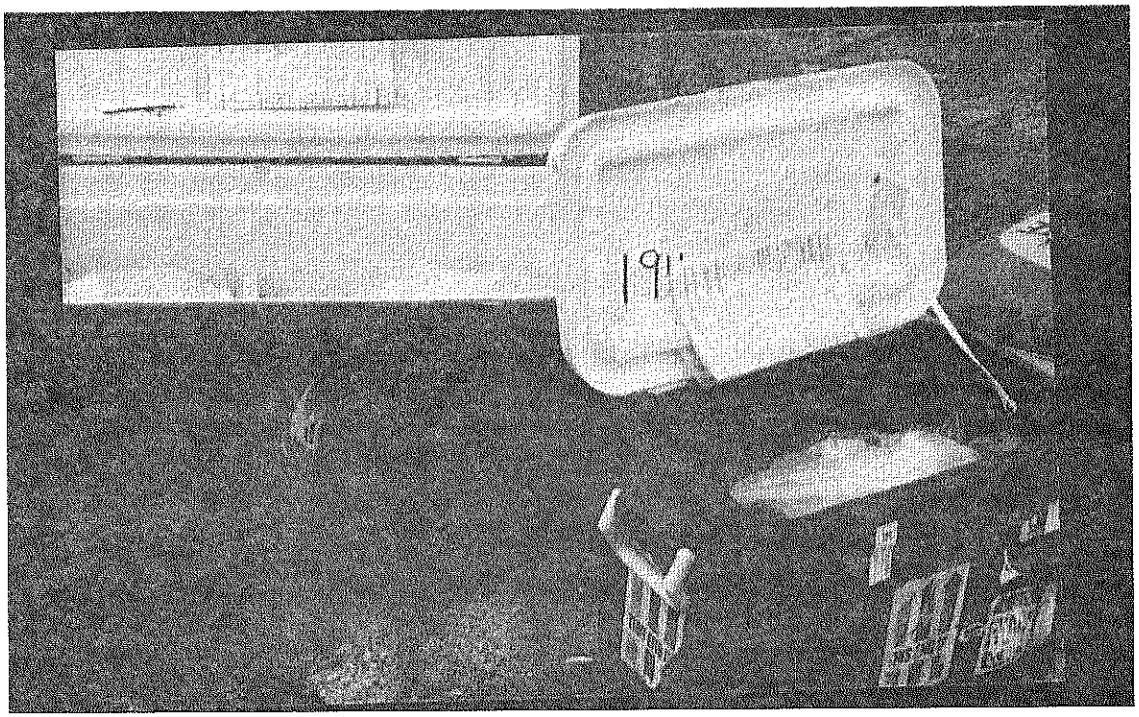
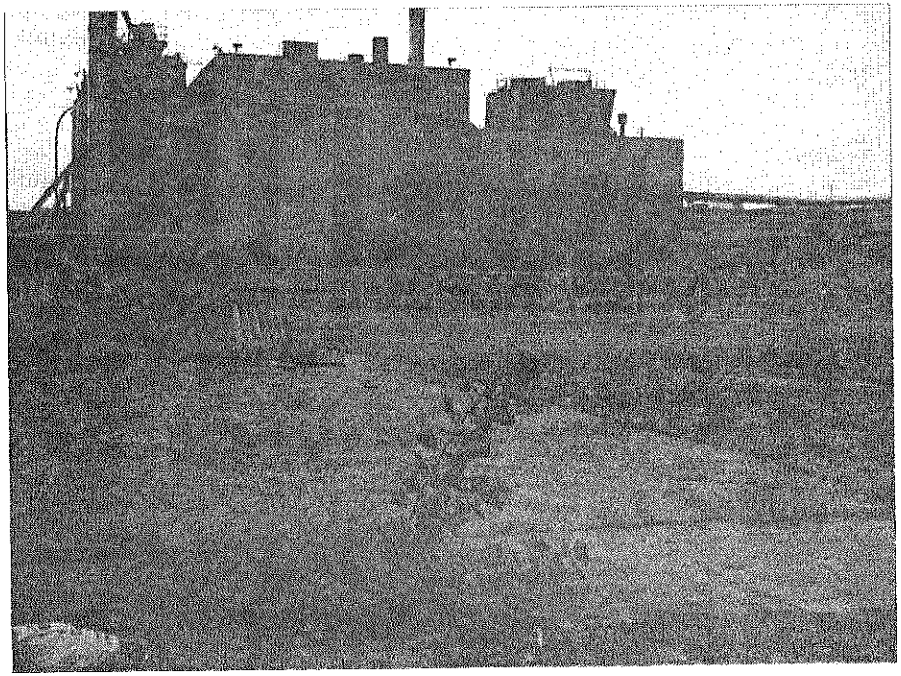





SITE
CITY
STATE
SAMPLE
DATE
TIME



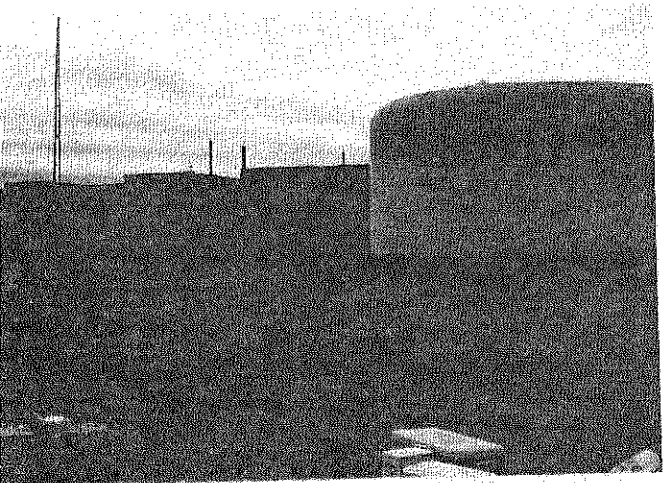

191

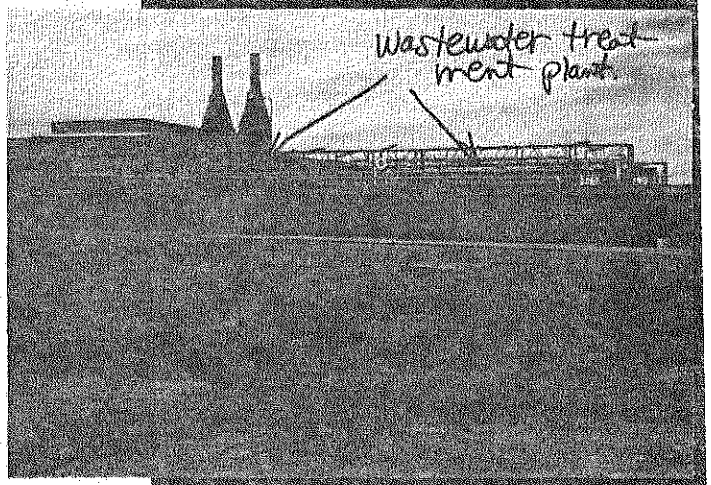


FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fischer Body Division Elyria Plant PAGE 1 OF 10

U.S. EPA ID: OHD004201091 (1) TDD: F05-9004-011 (2) PAN: FOH033ISB (3)





DATE: 9/18/90 TIME: 16:20 DIRECTION OF PHOTOGRAPH: West PHOTOGRAPHED BY: C. Schultz

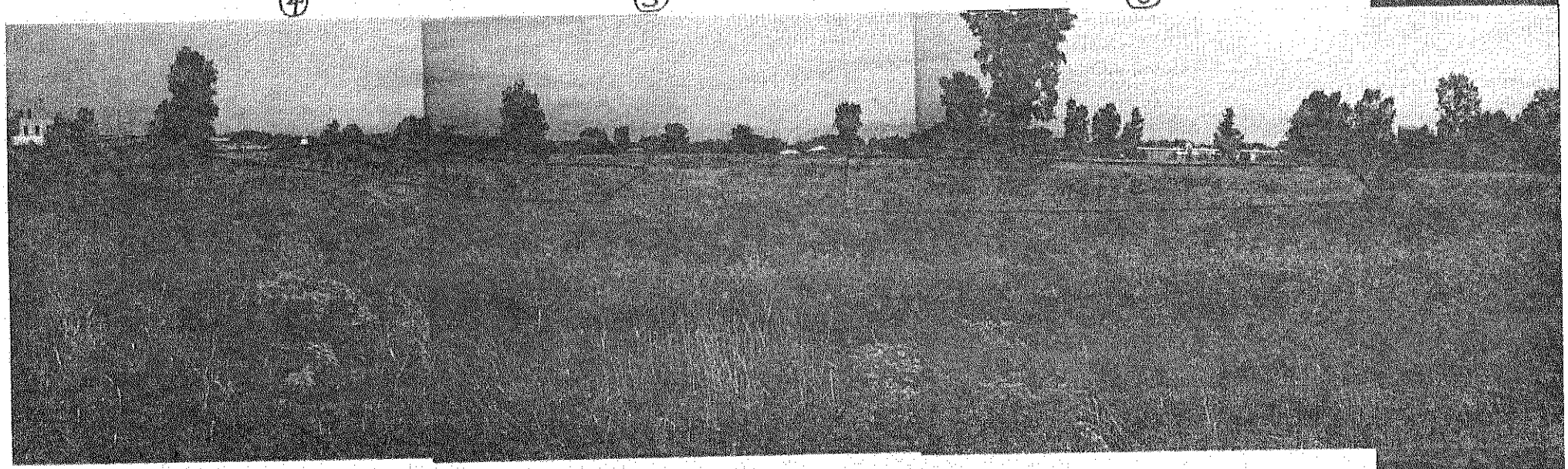
WEATHER CONDITIONS: 75°F, SUNNY SAMPLE ID (if applicable): NA

DESCRIPTION: former GMC plant. Note GMC wastewater treatment plant at far right.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC - Fisher Body Division Elyria Plant PAGE 1 OF 10

U.S. EPA ID: OHD004201091 (4) TDD: F05-9004-011 (5) PAN: F0H0331SB (6)



DATE: 9/18/90 TIME: 10:15 DIRECTION OF PHOTOGRAPH: NORTH PHOTOGRAPHED BY: C. Schultz

WEATHER CONDITIONS: 65°F, SUNNY SAMPLE ID (if applicable): NA

DESCRIPTION: Areas "A" AND "B" COVERED WITH FILL MATERIAL. BOUNDARIES ARE ESTIMATES ONLY.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fisher Body Elyria Plant PAGE 3 OF 10

U.S. EPA ID: OHD004201091 TDD: F05-9004-011 PAN: F0H0331SB

DATE: > 9/18/90

TIME: > 1300

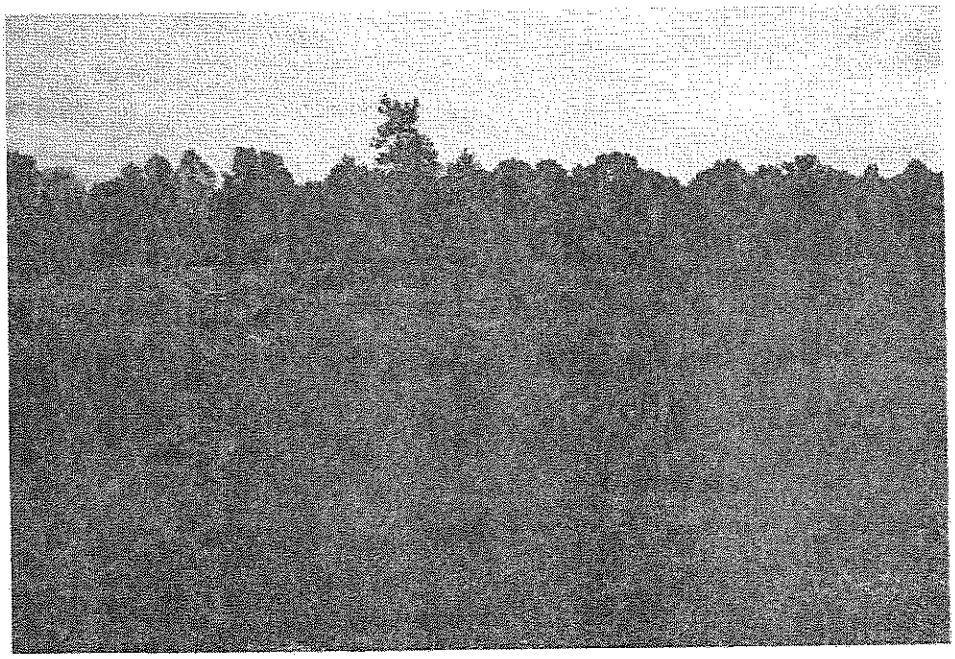
DIRECTION OF PHOTOGRAPH:
> EAST

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> NA



7

DESCRIPTION: > APPROXIMATE BOUNDARY OF AREA "C"

> NOW COVERED WITH FILL MATERIAL.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fischer Body Elyria Plant PAGE 4 OF 10

U.S. EPA ID: OHD004201091 TDD: F05-9004-011 PAN: F0H0331SB

DATE: > 9/18/90

TIME: > 1255

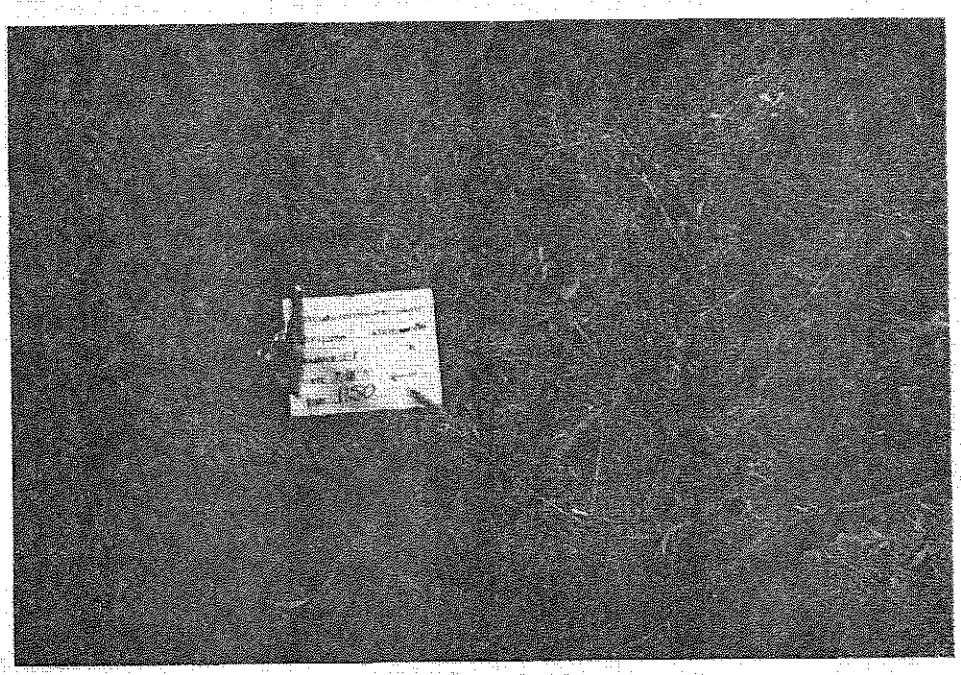
DIRECTION OF PHOTOGRAPH:
> W

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> S1



8

DESCRIPTION: > CLOSE UP OF SOIL SAMPLE S1.

>

DATE: > 9/18/90

TIME: > 1255

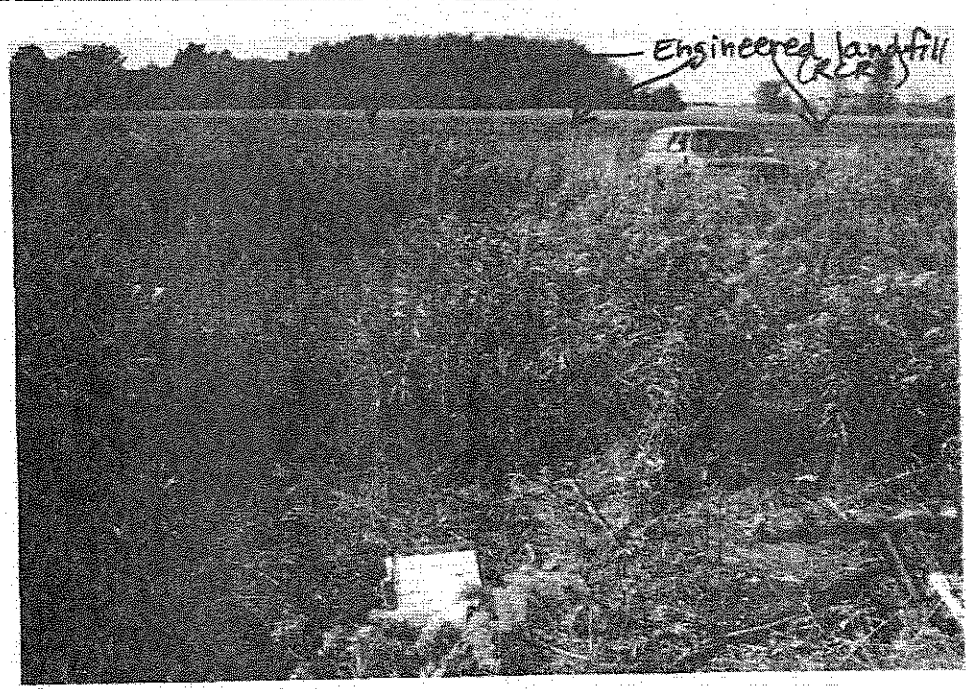
DIRECTION OF PHOTOGRAPH:
> W

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> S1



9

DESCRIPTION: > PERSPECTIVE OF SOIL S1. NOTE RCRA

> ENGINEERED LANDFILL IN THE BACKGROUND. COLLECTED IN AREA "C".

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fisher Body Elyria Plant PAGE 5 OF 10

U.S. EPA ID: OHD004201091 TDD: F05-9004-011 PAN: F0H0331SB

DATE: > 9/18/90

TIME: > 1255

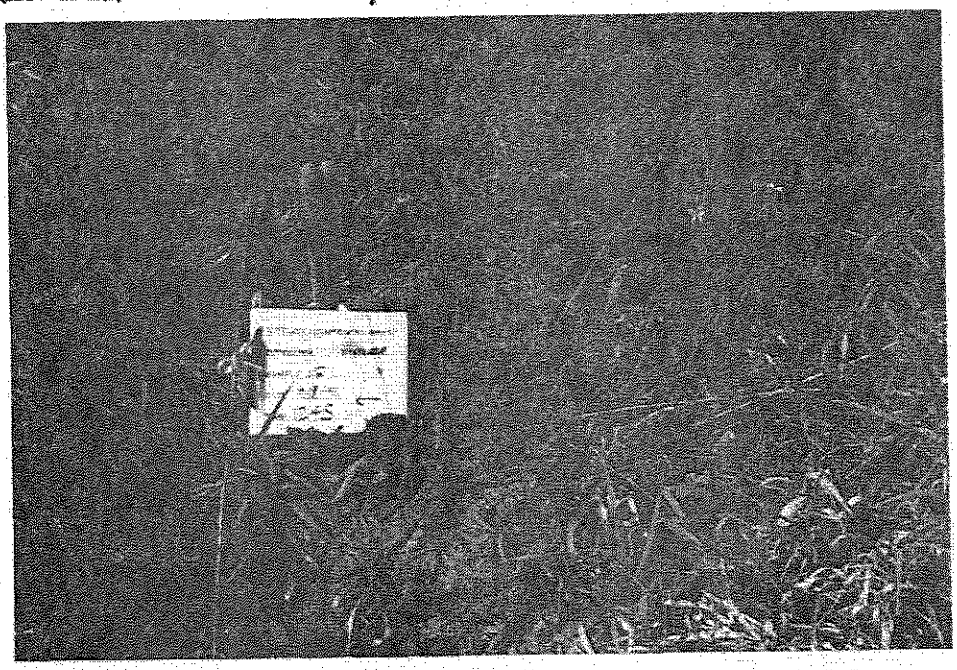
DIRECTION OF PHOTOGRAPH: > W

WEATHER CONDITIONS: > 75°F

> SUNNY

PHOTOGRAPHED BY: > C. SCHULTZ

SAMPLE ID (if applicable): > S2



10

DESCRIPTION: > CLOSE UP OF SOIL SAMPLE S2.

>

DATE: > 9/18/90

TIME: > 1255

DIRECTION OF PHOTOGRAPH: > W

WEATHER CONDITIONS: > 75°F

> SUNNY

PHOTOGRAPHED BY: > C. SCHULTZ

SAMPLE ID (if applicable): > S2

11

DESCRIPTION: > PERSPECTIVE OF SOIL SAMPLE S2

> LOCATED IN AREA "C".

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fischer Body Elyria Plant PAGE 6 OF 10

U.S. EPA ID: OHD004201091 TDD: F05-9004-011 PAN: FOH0331SB

DATE: > 9/18/90

TIME: > 1355

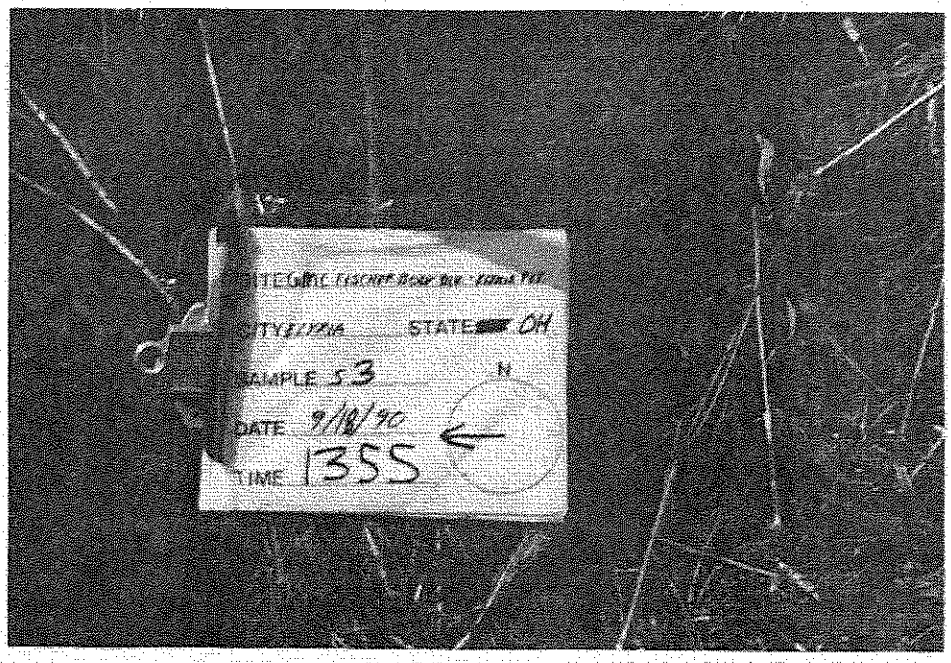
DIRECTION OF PHOTOGRAPH:
> WEST

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> S3



12

DESCRIPTION: > CLOSE UP OF S3. COLLECTED IN AREA

> "B". NOTE BRIGHT BLUE COLORING OF SOIL.

DATE: > 9/18/90

TIME: > 1355

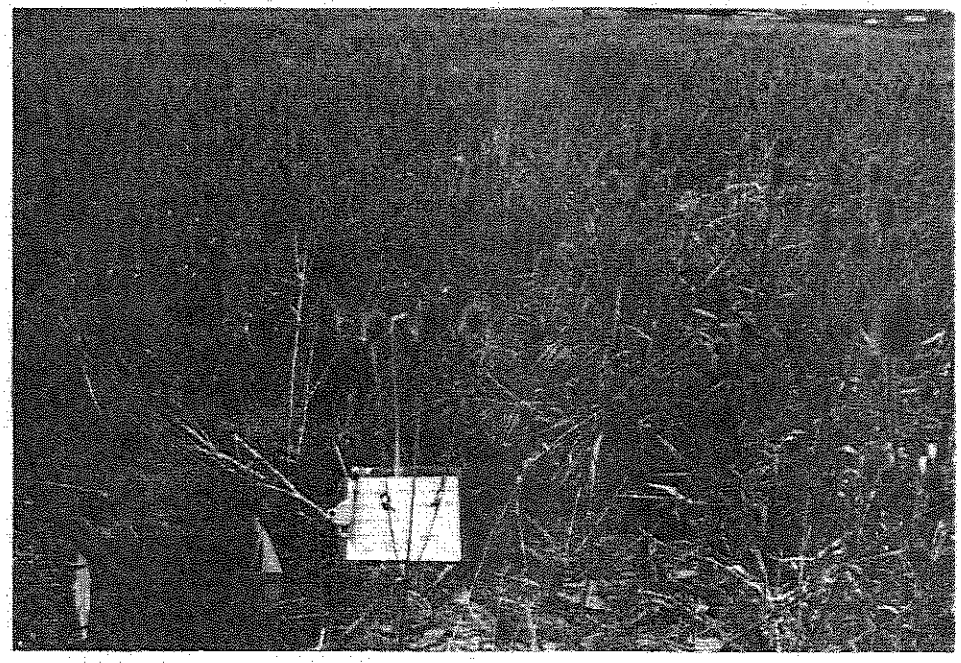
DIRECTION OF PHOTOGRAPH:
> WEST

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> S5



13

DESCRIPTION: > PERSPECTIVE OF S3.

>

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fischer Body Elyria Plant PAGE 7 OF 10

U.S. EPA ID: OHD004201091 TDD: F05-9004-011 PAN: F0H0331SB

DATE: > 9/18/90

TIME: > 1435

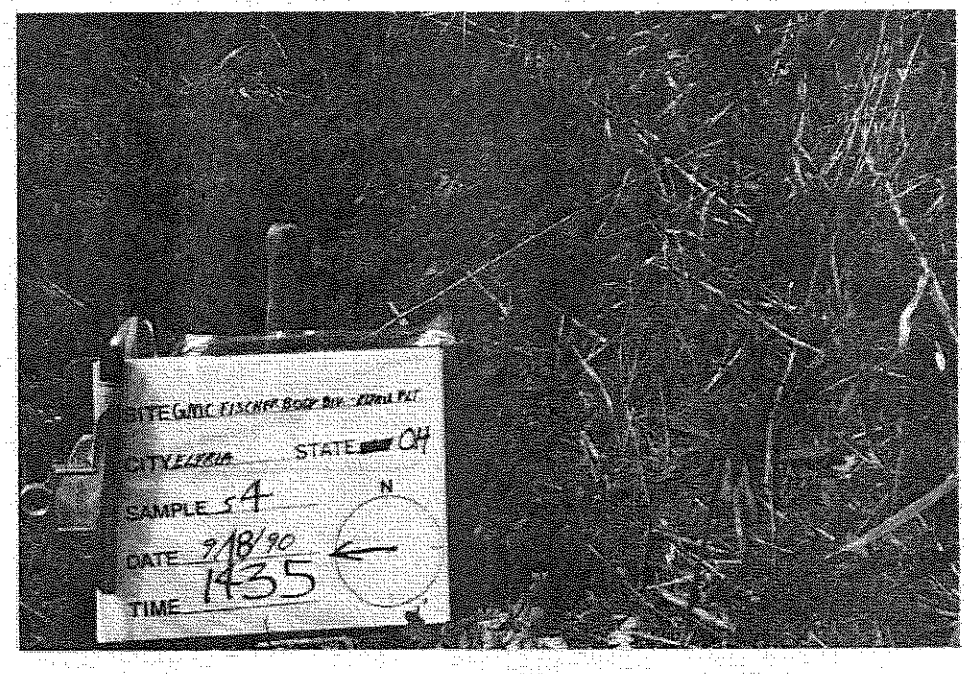
DIRECTION OF PHOTOGRAPH:
> WEST

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> S4



14

DESCRIPTION: > CLOSE UP OF SOIL SAMPLE S4. NOTE

> BRIGHT BLUE SOIL. COLLECTED IN AREA "B"

DATE: > 9/18/90

TIME: > 1435

DIRECTION OF PHOTOGRAPH:
> WEST

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> S4

DESCRIPTION: > PERSPECTIVE

> OF SOIL SAMPLE S4. GMC PLANT IN BACKGROUND

15

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fischer Body Elyria Plant PAGE 8 OF 10

U.S. EPA ID: OHD004201091 TDD: F05-9004-011 PAN: F0H0331SB

DATE: > 9/18/90

TIME: > 1515

DIRECTION OF PHOTOGRAPH: > WEST

WEATHER CONDITIONS: > 75°F

> SUNNY

PHOTOGRAPHED BY: > C. SCHULTZ

SAMPLE ID (if applicable): > 55

16

DESCRIPTION: > CLOSE UP OF SOIL SAMPLE 55.

> COLLECTED FROM AREA "A".

DATE: > 9/18/90

TIME: > 1515

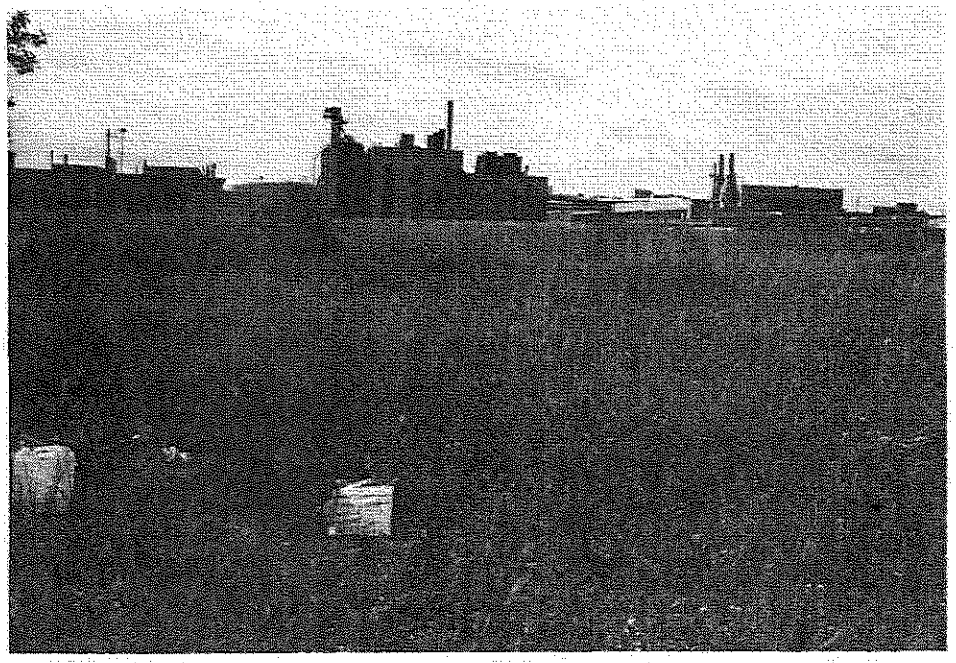
DIRECTION OF PHOTOGRAPH: > WEST

WEATHER CONDITIONS: > 75°F

> SUNNY

PHOTOGRAPHED BY: > C. SCHULTZ

SAMPLE ID (if applicable): > 55



17

DESCRIPTION: > PERSPECTIVE OF 55. Former GMC plant

> in background.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fisher Body Elyria Plant PAGE 9 OF 10

U.S. EPA ID: OHD004201091 TDD: F05-9004-011 PAN: F0H0331SB

DATE: > 9/18/90

TIME: > 1555

DIRECTION OF PHOTOGRAPH:
> WEST

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> S6

18

DESCRIPTION: > CLOSE UP OF SOIL SAMPLE S6. COLLECTED
> FROM LOCATION "A".

DATE: > 9/18/90

TIME: > 1555

DIRECTION OF PHOTOGRAPH:
> WEST

WEATHER CONDITIONS:
> 75°F

> SUNNY

PHOTOGRAPHED BY:
> C. SCHULTZ

SAMPLE ID (if applicable):
> S6

19

DESCRIPTION: > PERSPECTIVE OF SOIL SAMPLE S6.
> FORMER GMC PLANT IN THE BACKGROUND.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GMC-Fischer Body Elyria Plant PAGE 10 OF 10

U.S. EPA ID: OHD004201091 TDD: F05-9004-011 PAN: FOH0331SB

DATE: > 9/18/90

TIME: > 1650

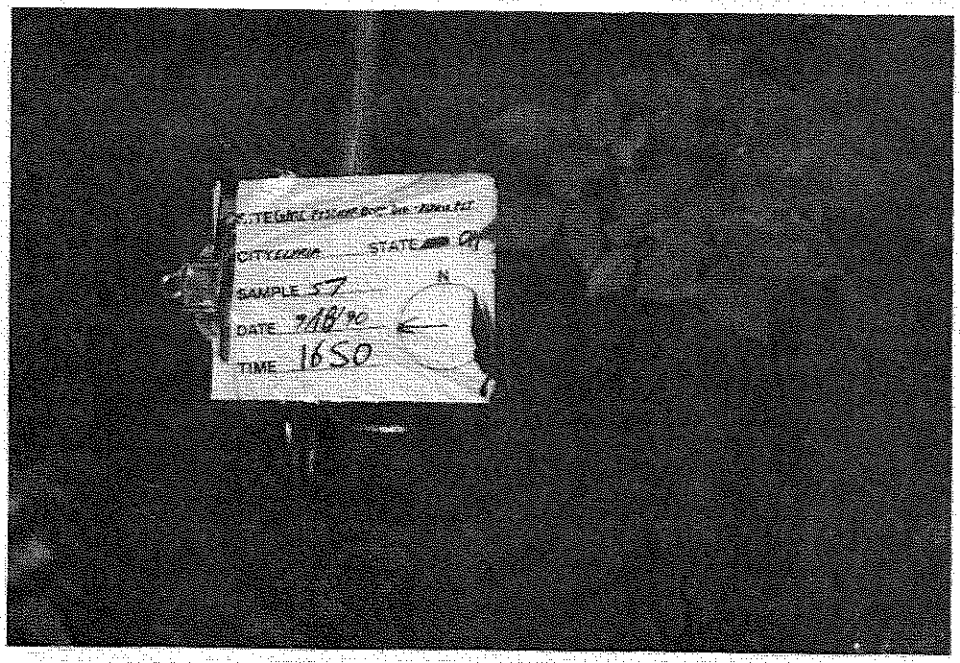
DIRECTION OF PHOTOGRAPH: > WEST

WEATHER CONDITIONS: > 75°F

> SUNNY

PHOTOGRAPHED BY: > C. SCHULTZ

SAMPLE ID (if applicable): > S7



20

DESCRIPTION: > CLOSE UP OF SOIL SAMPLE S7.

> COLLECTED AS A BACKGROUND SOIL SAMPLE.

DATE: > 9/18/90

TIME: > 1650

DIRECTION OF PHOTOGRAPH: > WEST

WEATHER CONDITIONS: > 75°F

> SUNNY

PHOTOGRAPHED BY: > C. SCHULTZ

SAMPLE ID (if applicable): > S7

21

DESCRIPTION: > PERSPECTIVE OF SOIL SAMPLE S7.

> COLLECTED IN A DECIDUOUS FOREST.

D

APPENDIX D

U.S. EPA TARGET COMPOUND LIST AND TARGET ANALYTE LIST QUANTITATION/DETECTION LIMITS

ADDENDUM A

ROUTINE ANALYTICAL SERVICES

CONTRACT REQUIRED DETECTION AND QUANTITATION LIMITS

Contract Laboratory Program
Target Compound List
Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Chloromethane	74-87-3	10 ug/L	10 ug/Kg
Bromomethane	74-83-9	10	10
Vinyl chloride	75-01-4	10	10
Chloroethane	75-00-3	10	10
Methylene chloride	75-09-2	5	5
Acetone	67-64-1	10	5
Carbon disulfide	75-15-0	5	5
1,1-dichloroethene	75-35-4	5	5
1,1-dichloroethane	75-34-3	5	5
1,2-dichloroethene (total)	540-59-0	5	5
Chloroform	67-66-3	5	5
1,2-dichloroethane	107-06-2	5	5
2-butanone (MEK)	78-93-3	10	10
1,1,1-trichloroethane	71-55-6	5	5
Carbon tetrachloride	56-23-5	5	5
Vinyl acetate	108-05-4	10	10
Bromodichloromethane	75-27-4	5	5
1,2-dichloropropane	78-87-5	5	5
cis-1,3-dichloropropene	10061-01-5	5	5
Trichloroethene	79-01-6	5	5
Dibromochloromethane	124-48-1	5	5
1,1,2-trichloroethane	79-00-5	5	5
Benzene	71-43-2	5	5
Trans-1,3-dichloropropene	10061-02-6	5	5
Bromoform	75-25-2	5	5
4-Methyl-2-pentanone	108-10-1	10	10
2-Hexanone	591-78-6	10	10
Tetrachloroethene	127-18-4	5	5
Toluene	108-88-3	5	5
1,1,2,2-tetrachloroethane	79-34-5	5	5
Chlorobenzene	108-90-7	5	5
Ethyl benzene	100-41-4	5	5
Styrene	100-42-5	5	5
Xylenes (total)	1330-20-7	5	5

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Phenol	108-95-2	10 ug/L	330 ug/Kg
bis(2-Chloroethyl) ether	111-44-4	10	330
2-Chlorophenol	95-57-8	10	330
1,3-Dichlorobenzene	541-73-1	10	330
1,4-Dichlorobenzene	106-46-7	10	330
Benzyl Alcohol	100-51-6	10	330
1,2-Dichlorobenzene	95-50-1	10	330
2-Methylphenol	95-48-7	10	330
bis(2-Chloroisopropyl) ether	108-60-1	10	330
4-Methylphenol	106-44-5	10	330
N-Nitroso-di-n-dipropylamine	621-64-7	10	330
Hexachloroethane	67-72-1	10	330
Nitrobenzene	98-95-3	10	330
Isophorone	78-59-1	10	330
2-Nitrophenol	88-75-5	10	330
2,4-Dimethylphenol	105-67-9	10	330
Benzoic Acid	65-85-0	50	1600
bis(2-Chloroethoxy) methane	111-91-1	10	330
2,4-Dichlorophenol	120-83-2	10	330
1,2,4-Trichlorobenzene	120-82-1	10	330
Naphthalene	91-20-3	10	330
4-Chloroaniline	106-47-8	10	330
Hexachlorobutadiene	87-68-3	10	300
4-Chloro-3-methylphenol	59-50-7	10	330
2-Methylnaphthalene	91-57-6	10	330
Hexachlorocyclopentadiene	77-47-4	10	330
2,4,6-Trichlorophenol	88-06-2	10	330
2,4,5-Trichlorophenol	95-95-4	50	1600
2-Chloronaphthalene	91-58-7	10	330
2-Nitroaniline	88-74-4	50	1600
Dimethylphthalate	131-11-3	10	330
Acenaphthylene	208-96-8	10	330
2,6-Dinitrotoluene	606-20-2	10	330
3-Nitroaniline	99-09-2	50	1600
Acenaphthene	83-32-9	10	330
2,4-Dinitrophenol	51-28-5	50	1600
4-Nitrophenol	100-02-7	50	1600
Dibenzofuran	132-64-9	10	330
2,4-Dinitrotoluene	121-14-2	10	330
Diethylphthalate	84-66-2	10	330
4-Chlorophenyl-phenyl ether	7005-72-3	10	330

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SLUDGE SEDIMENT
Fluorene	86-73-7	10 ug/L	330 ug/Kg
4-Nitroaniline	100-01-6	50	1600
4,6-Dinitro-2-methylphenol	534-52-1	50	1600
N-nitrosodiphenylamine	86-30-6	10	330
4-Bromophenyl-phenylether	101-55-3	10	330
Hexachlorobenzene	118-74-1	10	330
Pentachlorophenol	87-86-5	50	1600
Phenanthrene	85-01-8	10	330
Anthracene	120-12-7	10	330
Di-n-butylphthalate	84-74-2	10	330
Fluoranthene	206-44-0	10	330
Pyrene	129-00-0	10	330
Butylbenzylphthalate	85-68-7	10	330
3,3'-Dichlorobenzidine	91-94-1	20	660
Benzo(a)anthracene	56-55-3	10	330
Chrysene	218-01-9	10	330
bis(2-Ethylhexyl)phthalate	117-81-7	10	330
Di-n-octylphthalate	117-84-0	10	330
Benzo(b)fluoranthene	205-99-2	10	330
Benzo(k)fluoranthene	207-08-9	10	330
Benzo(a)pyrene	50-32-8	10	330
Indeno(1,2,3-cd)pyrene	193-39-5	10	330
Dibenz(a,h)anthracene	53-70-3	10	330
Benzo(g,h,i)perylene	191-24-2	10	330

Table A
Contract Laboratory Program
Target Compound List
Pesticide and PCB Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
alpha-BHC	319-84-6	0.05 ug/L	8 ug/Kg
beta-BHC	319-85-7	0.05	8
delta-BHC	319-86-8	0.05	8
gamma-BHC (Lindane)	58-89-9	0.05	8
Heptachlor	76-44-8	0.05	8
Aldrin	309-00-2	0.05	8
Heptachlor epoxide	1024-57-3	0.05	8
Endosulfan I	959-98-8	0.05	8
Dieldrin	60-57-1	0.10	16
4,4'-DDE	72-55-9	0.10	16
Endrin	72-20-8	0.10	16
Endosulfan II	33213-65-9	0.10	16
4,4'-DDD	72-54-8	0.10	16
Endosulfan sulfate	1031-07-8	0.10	16
4,4'-DDT	50-29-3	0.10	16
Methoxychlor (Mariate)	72-43-5	0.5	80
Endrin ketone	53494-70-5	0.10	16
alpha-Chlordane	5103-71-9	0.5	80
gamma-chlordane	5103-74-2	0.5	80
Toxaphene	8001-35-2	1.0	160
AROCLOR-1016	12674-11-2	0.5	80
AROCLOR-1221	11104-28-2	0.5	80
AROCLOR-1232	11141-16-5	0.5	80
AROCLOR-1242	53469-21-9	0.5	80
AROCLOR-1248	12672-29-6	0.5	80
AROCLOR-1254	11097-69-1	1.0	160
AROCLOR-1260	11096-82-5	1.0	160

Table A (Cont.)

CONTRACT LABORATORY PROGRAM

TARGET ANALYTE LIST (TAL)

INORGANIC DETECTION LIMITS

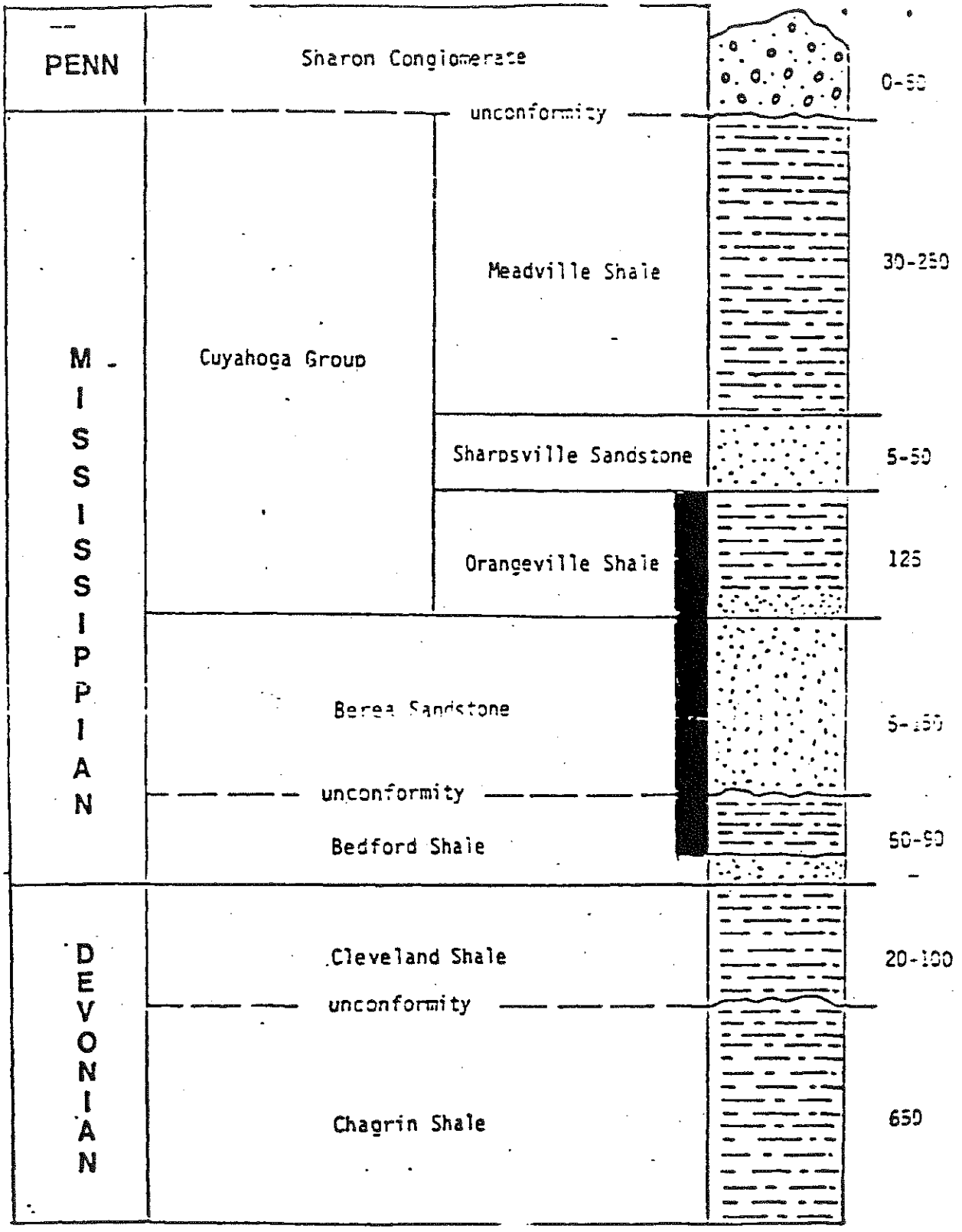
Compound	Procedure	Detection Limits: Water (µg/L)	Detection Limits: Soil Sediment Sludge (mg/kg)
aluminum	ICP	200	40
antimony	furnace	60	2.4
arsenic	furnace	10	2
barium	ICP	200	40
beryllium	ICP	5	1
cadmium	ICP	5	1
calcium	ICP	5,000	1,000
chromium	ICP	10	2
cobalt	ICP	50	10
copper	ICP	25	5
iron	ICP	100	20
lead	furnace	5	1
magnesium	ICP	5,000	1,000
manganese	ICP	15	3
mercury	cold vapor	0.2	0.008
nickel	ICP	40	8
potassium	ICP	5,000	1,000
selenium	furnace	5	1
silver	ICP	10	2
sodium	ICP	5,000	1,000
thallium	furnace	10	2
tin	ICP	40	8
vanadium	ICP	50	10
zinc	ICP	20	4
cyanide	color	10	2

3767:1

E

APPENDIX E

SOIL BORING LOGS OF THE SITE

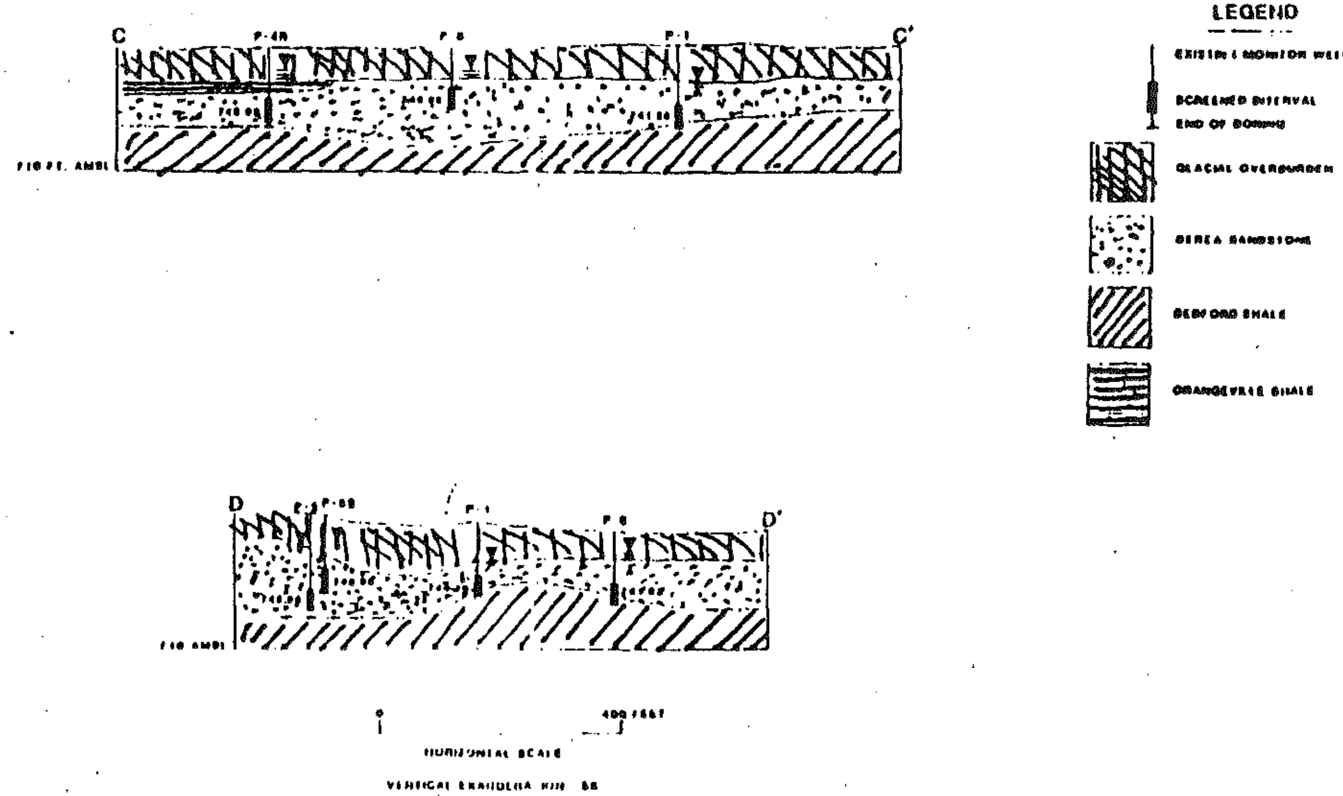


SITE BORING LOG

PARTIAL GEOLOGIC COLUMN FOR LORAIN COUNTY

SITE BORING LOG

GEOLOGIC CROSS-SECTION
GMC – FISHER GUIDE
ELYRIA, OHIO



WESTON